# MODELLING THE IMPLEMENTATION OF HR BUSINESS PROCESSES TO ACHIEVE SUSTAINABLE DEVELOPMENT IN A TELECOMMUNICATION COMPANY

#### Ioana Miruna TATARU

University Politehnica of Bucharest 313 Splaiul Independentei St., 060042 Bucharest, RO <u>tataru.miruna@gmail.com</u>

#### **Elena FLEACA**

University Politehnica of Bucharest 313 Splaiul Independentei St., 060042 Bucharest, RO <u>elena.fleaca@upb.ro</u>

#### **Bogdan FLEACA**

University Politehnica of Bucharest 313 Splaiul Independentei St., 060042 Bucharest, RO <u>bogdan.fleaca@upb.ro</u>

#### Abstract

One of the world-leading telecommunication companies has developed a sustainable business strategy that includes women's empowerment and raising awareness on sustainability among their employees. This paper will analyze and model the main human resources (HR) business processes that can contribute towards achieving these goals. To firstly identify the main HR business processes, the authors will use the APQC Process Classification Framework, using the data sheets that report their progress and the programs implemented by the company. The analysis will provide three HR business processes that will be further analyzed: Development of human resources plans to support women's empowerment, managing women's retention within the organization and Informing employees about the adoption of socially responsible behavior. As a research methodology, the authors will first apply the value stream analysis method to provide an initial state of the processes, using the APQC activities and a set of initial key performance indicators. Then, the activities within the processes will be classified by their added value. For a future state of the processes, the non-valueadded activities will be eliminated and a new set of quality key performance indicators will be proposed. This future state will be further modeled to provide a strategical view of the processes to the stakeholders and the critical steps to pursue. This future state of the processes will be mapped using Suppliers-Inputs-Process-Outputs-Customers (SIPOC) method. These processes will then be modeled using the event-driven process chain method (EPC), which provides a comprehensive view of the process, being adapted for business stakeholders. This modeling will provide a clear view of the sequence of activities and the responsible units, allowing the stakeholders to identify the main inputs and outputs of the HR processes modeled. Thus, this paper will provide an analysis of the key HR business processes that can be improved to achieve woman empowerment and to raise awareness in the sustainability domain. This paper is an enhancement to the existing studies on employees' crucial role in corporate social responsibility (CSR) and the importance of women's empowerment to create a better society.

#### Keywords

Sustainable development; CSR; women's empowerment; HR; processes.

### Introduction

The human resources (HR) implications in corporate social responsibility initiatives are significant, due to their role in sustainable development goals related to gender equality, quality education, sustainable cities and communities, decent work, and economic growth (Sustainable Development Goals Knowledge Platform, 2015). All these sustainable development goals are included in companies' corporate social responsibility (CSR) strategy.

Chiara and Spena (2011) argue that multinational corporations tend to be more open to responsible and sustainable business activities. Thus, this paper will analyze the state of a multinational company from the telecommunication industry, Vodafone Group Plc.

Cohen (2017) considers that corporate social responsibility is a key element towards an enhanced company brand image, new business opportunities, and better risk management. For the HR department, it is a key element of the company culture and a strategic objective. The human resources department leads the way towards a CSR culture in any company, because it educates, engages, and empowers the workforce to participate in the CSR agenda. Thus, HR plays an important role in creating responsible leadership, meaning supporting the employees in a 'relationally intelligent' way and engaging them to perform social activities (Pless & Maak, 2005).

Previous research investigates whether and how the HR department support employees' involvement in corporate social responsibility initiatives, by conducting a survey among HR professionals, and discovering that their role is crucial in organizations' CSR culture (Pless & Maak, 2012). Another study emphasizes the core role of employees in building sustainability in a company, by participating in CSR activities (Rosca, Badulescu, & Bac, 2018). Brezoiu (2012) describes the implications of a CSR program in HR, arguing that it brings a sense of belonging and recognition, it develops communication and teamwork skills and it provides a better understanding of corporate values for the employees.

As gender equality is a United Nations Sustainable Development Goal [SDG], women's empowerment has become an interest in many companies. As Sridevi (2015) argues, women need to have access to well-paid jobs and influence so that they can contribute towards a better society. Women's empowerment is one of the pillars of Vodafone's sustainable development strategy (Vodafone Group Plc, 2019), thus the business processes that will be analyzed in this paper will also be related to achieving this goal. Thus, this paper is an enhancement of the previous studies because it analyses the main HR business processes that contribute towards sustainability goals: women's empowerment and engaging employees in CSR activities. Value stream analysis is performed on the processes, analyzing the activities on their added value. The proposed future state of the processes is then modeled using Suppliers-Inputs-Process-Outputs-Customers (SIPOC) and Event-driven Process Chain (EPC) methods. This allows stakeholders to identify the main inputs and outputs of the HR processes that need to be enhanced to drive sustainability within the company.

## Research methodology and input data

The first step is to identify the input data, meaning to identify the human resources (HR) business processes responsible for sustainability. As a methodology, authors will use the APQC Process Classification Framework (PCF) for the telecommunications industry, the CSR programs implemented by the company described in the 2019 Sustainable Business Report, and the datasheet that reports the company's progress towards achieving sustainability (APQC, 2018; Vodafone, 2019; Vodafone Group Plc, 2019).

According to APQC, the HR processes are in Category 6. Moreover, environmental, health, and safety programs need to be put in place to drive sustainability and the responsible processes are in Category 10 (APQC, 2018).

The HR business process categories are summarized in Table 1.

Tuble 1. III Dusiness process cutegories			
APQC Category Number	C Category Number APQC Category Name		
C6	Develop and Manage Human Capital		
C10	Manage Environmental Health and Safety		
Authons' contribution			

#### Table 1. HR Business process categories

Authors' contribution

Vodafone has reported an interest to support women's empowerment, thus sustaining gender equality, quality education and decent work and economic growth (Sustainable Development Goals Knowledge Platform, 2015). It has two main ambitions: to become the world's best employer for women and to connect an additional 50 million women living in emerging markets to mobile (Vodafone Group Plc, 2019). Thus, in Table 2 the programs that sustain the women's empowerment goal and the CSR awareness among employees are identified and mapped with the corresponding APQC process (APQC, 2018; Vodafone Group Plc, 2019).

Tuble 2. IIK business process groups			
APQC Category	Process	Program	
Number			
C6	Develop and manage human resources	Human Resources Strategy	
	(HR) planning,	available within the company	
	policies, and strategies		
C6	Develop and implement human	ReConnect	
	resources plans		
С6	Reward and retain employees	ConnectedSheCan	
C10	Train and educate employees	#RedLovesGreen	

### Table 2. HR Business process groups

Authors' contribution

According to Vodafone's CSR report, ReConnect is a program to recruit women after a career break, providing coaching, flexible working time, and a phased return to work. Supporting also women's empowerment, ConnectedSheCan is a program to coach and train senior leaders, preparing them to take the role. The #RedLovesGreen is a program to engage employees in CSR activities, making them aware of the actions that they can take to reduce their emissions both as individuals and within the business (Vodafone Group Plc, 2019).

In Table 3, using Vodafone's CSR programs and the data reported by the company, three main HR business processes have been identified (APQC, 2018; Vodafone, 2019).

Table 3. HK main Business processes			
Process	Data		
Development of human resources plans to support	40% women (around 36500 employed		
women's empowerment	directly)		
	31% women in management and		
	leadership		
	310 women recruited through		
	ReConnect		
Managing women's retention within the	15 senior leaders have been coached in		
organization	ConnectedSheCan		
Informing employees about the adoption of a	7000 participants in #RedLovesGreen		
socially responsible behavior			
Authors' contribution			

Table 3. HR main Business processes

Authors' contribution

These processes will be further analyzed and modeled, to provide a better view of them for the stakeholders. Although the data provided is from Vodafone, all companies interested to enhance their human resources processes for a more sustainable business can use this process analysis.

## The initial state of the processes and analysis

An initial state of the process is necessary to identify process improvements. Key performance indicators (KPIs) monitor process performance and different types of performance can be measured, such as control or operation (Lindberga et al., 2015). Waste is defined by any low-performance indicator such as waiting, over-processing, defects (Pearson, 2014).

For the elaboration of the tables, the activities defined APQC have been used (APQC, 2018). The initial state of KPIs contains also the classification for each activity by their added value: value-added activity, non-value-added activity, and essential non-value-added activity, to enable process improvement (Atlassian, 2019; Eswaramurthi & Mohanram, 2013).

Process activities will be divided by their added value along with the justification for the status. The following notations have been made:

P1 = Development of human resources plans to support women's empowerment

P2= Managing women's retention within the organization

P3= Informing employees about the adoption of a socially responsible behavior

Table 4 outlines the initial state of the "Development of human resources plans to support women's empowerment" (P1) process and the HR department is responsible for the execution of all these activities. The analysis and evaluation activities are necessary to ensure the alignment between the previous activities.

Table 4. P1 initial state				
No.	Activity	KPI	Value	Justification
A1.1	Centralize skills and	Skills list outlined	VA	Prevents repetition of
	gender diversity	70%		next activities
	requirements			
A1.2	Plan gender diversity	Requirements list	VA	Define necessary
	requirements per	outlined 70%		employees' database
	organizational unit			
A1.3	Define workforce	Needs list	VA	Align internal and
	qualification needs	outlined 70%		market requirements
A1.4	Plan training and coaching	Training list	VA	It is vital to have a HR
	for women	outlined 70%		plan for coaching
				women
A1.5	Analysis and evaluation	Lists analyzed	ENVA	Alignment
A1.6	Plan female employees'	Benefit plan	VA	Benefits suited for
	benefits package	outlined 70%		women
A1.7	Develop a reward plan for	Reward plan	VA	To ensure gender
	female employees	outlined 70%		equality
A1.8	Develop HR policies	HR policies	NVA	A similar activity is
		outlined 70%		done in P2
A1.9	Analysis and evaluation	Plans analyzed	ENVA	Alignment
A1.10	Improve the HR strategy	HR strategy	VA	To include development
		improved 70%		of HR plans for women
A1.11	Analysis and evaluation	HR strategy	VA	Alignment
		analyzed		

Table 4. P1 initial state

Authors' contribution

Table 5 outlines the initial state of "Managing women's retention within the organization" (P2) process and the HR department is responsible for the execution of all these activities. Some activities do not bring any value because they are done in a previous process or they can easily be done along with upcoming activities.

No.	Activity	KPI	Value	Justification
A2.1	Identify reward	Requirements list	NVA	Activity to be done
	requirements based on	outlined 70%		with A2.9
	financial resources,			
	benefits and HR policies			
A2.2	Perform competitive	List of company's	NVA	Activity performed in
	analysis of employee's	benefits vs		P1: A1.6 and A1.7
	benefits and rewards	competition		
		outlined 70%		
A2.3	Develop a work-life balance	Work-life balance	VA	Essential for women's
	support plan	plan outlined 70%		retention
A2.4	Analysis and evaluation	Plans analyzed	ENVA	Alignment
A2.5	Develop a family support	Family support	VA	Essential for women's
	plan	plan outlined 70%		retention
A2.6	Analysis and evaluation	Plan analyzed	ENVA	Alignment
A2.7	Examine motivation and	Retention	VA	Prevents repetition of
	retention indicators	indicators		next activities
		outlined 70%		
A2.8	Analysis and evaluation	Lists analyzed	ENVA	Alignment
A2.9	Review the reward plan	Reward plan	VA	Essential for women's
		reviewed 70%		retention

No.	Activity	KPI	Value	Justification
A2.10	Analysis and evaluation	Plan analyzed	ENVA	Alignment
A2.11	Improve HR strategy	HR strategy	VA	To include women's
		improved 70%		retention activities

Authors' contribution

Table 6 outlines the initial state of the "Informing employees about the adoption of socially responsible behavior" (P3) process and both CSR (if exists) and HR department must work together to execute the process activities.

No.	Activity	KPI	Value	Justification
A3.1	Examine internal requirements related to the environment, health and safety (EHS)	Requirements list outlined 70%	VA	Prevents repetition of next activities
A3.2	Examine motivation and retention requirements	Retention indicators outlined 70%	VA	Prevents repetition of next activities
A3.3	Create a CSR training plan	CSR training plan outlined 80%	VA	Prevents repetition of next activities
A3.4	Implement CSR training plan	60% informed employees	VA	To measure the results
A3.5	Provide support for employees	100% employees receive support	NVA	Activity can be done with A3.4 by CSR and HR departments
A3.6	Measure results	50% involved employees (from the informed ones)	VA	To verify the plan's implementation results
A3.7	Take corrective actions	Action plan outlined 80%	VA	Only if necessary
A3.8	Standardize employee training plan	Plan outlined 80%	VA	To ensure sustainable results

Table 6. P3 initial state

Authors' contribution

## The future state of the processes

## Proposed key performance indicators

The general process performance is defined as descriptive data of process activities and it is not related to quantitative parameters such as time or costs (Looy & Shafagatova, 2016). To propose the future state of the processes, the non-value-added activities will be eliminated (NVA). For the quality, KPIs set the results are subjective and it can be adapted for each company applying them.

For the first process, the A1.8 activity can be eliminated, and the development of an HR strategy for women empowerment implies a complete HR strategy (100%) that outlines the steps towards achieving this goal. For the second process, the A2.1 and A2.2

activities can be eliminated, and a high women's retention within the organization can be achieved if a reward plan, a work-life balance support plan, and a family support plan are put in place and included in the HR strategy (100%). For the third process, A3.5 activity can be eliminated and the proposed KPIs are: 100 % informed employees and 75% employees to engage in CSR activities. Employees can be engaged via an internal social media platform, sharing stories and information, and by proposing sustainability solutions for the business operations.

### Modeling the HR business processes

A process describes a flow of activities that transforms input elements into outputs and Suppliers-Inputs-Process-Outputs-Customers (SIPOC) is a graphical process representation method (Fleaca, Fleaca & Maiduc, 2018; Furterer, 2009; Michael, 2003). The Event-driven Process Chain (EPC) method will be used to describe the sequence of process activities to give a strategical view for stakeholders (Aris Community, 2009).

For the "Development of human resources plans to support women's empowerment" (P1) business process, the input data is market requirements, employee data, and the current reward plan. The process execution will generate an approved skills and diversity plan, an approved reward plan, and an updated HR strategy that includes the percentage of women in the workplace filling different roles. These outputs will be used by the HR department, the management, the employee, and also in the second process (managing the women's retention in the workplace). P1 is depicted in Figure 1.

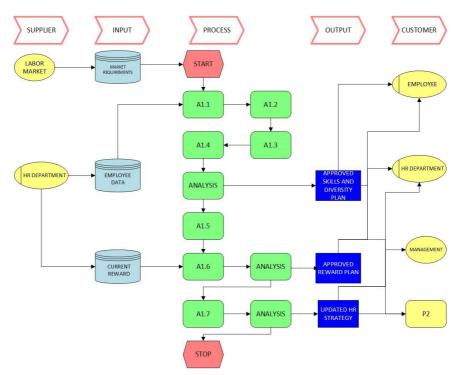


Figure 1. Modeling the P1 business process (Authors' contribution)

For the "Managing women's retention within the organization" (P2) business process, the input data is the updated HR strategy from P1, the approved reward plan, and employee data. The process execution will generate two new HR plans (work-life balance and family support plan), an updated reward plan, and an updated HR strategy to include strategies for women's retention and the projected turnover rate. The process outputs will be used by the HR department, the management, the employee and also by the third process (informing employees about the adoption of a socially responsible behavior). P2 is depicted in Figure 2.

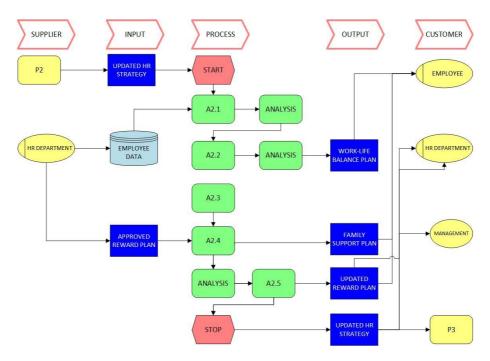


Figure 2. Modeling the P2 business process (Authors' contribution)

For the "Informing employees about the adoption of socially responsible behavior" (P3) business process, the HR strategy updated from P2 and the CSR program developed by HR and CSR department are used as input data. The process execution will generate a CSR training plan for employees, that will be used in the HR department, in the CSR department (if it exists separately or the function is embedded in HR or Marketing departments) and by the management of the organization.

P3 is depicted in Figure 3.

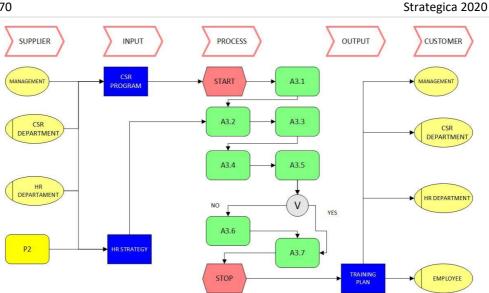


Figure 3. Modeling the P3 business process (Authors' contribution)

## Conclusions

This paper, through problematic, approach and results, models the implementation of human resources business processes to achieve sustainable development in a telecommunication company, Vodafone Group Plc. The following HR business processes have been identified using APQC, implemented CSR programs and report data: Development of human resources plans to support women's empowerment, managing women's retention within the organization and Informing employees about the adoption of socially responsible behavior. The modeling of these processes demonstrated that the HR department plays the lead role in women's empowerment in the workplace (senior leadership, percentage of female workers, retention ratios) as well as the employees' engagement in CSR activities. The proposed quality KPIs indicate that, to achieve sustainable development in the company, is it necessary to have a complete HR strategy to include women's retention in the workplace and to spread the word about CSR among all the employees, so that they can involve in CSR activities if they are interested in. The HR department, as well as the CSR department (if exists) play the lead role and they are the direct beneficiaries of the processes' outcomes, as the SIPOC/EPC diagrams demonstrated.

Companies can develop several mechanisms to support women's empowerment and employee retention. In the current context, to ensure employees' safety some organizations have implemented telework. It is expected that telework becomes a retention mechanism because it provides advantages for both parties. Employees can achieve work-life balance as they have a flexible schedule and possibly improved morale. Their productivity increases, as there is no commute time and they have more time available for work. Companies can reduce their administrative expenses such as energy, heating and office supplies, ensuring program continuity at the same time.

To further develop the research, the authors will expand the study by designing appropriate business process control measures to achieve lasting results.

### References

APQC (2018). APQC: Telecommunications Process Classification Framework. Retrieved from <u>https://ebpm.ir/wp-</u>

content/uploads/2018/05/PCF Telecom Ver 5.0.2.pdf

- Aris Community (2009). Event-driven process chain (EPC). Retrieved from https://www.ariscommunity.com/event-driven-process-chain
- Atlassian (2019). Value Stream Mapping. Retrieved from <u>https://tallyfy.com/value-stream-mapping/</u>
- Brezoiu, G.A. (2012). Managerial Challenges in the Context of Using New Media Technologies. *Business Excellence and Management, 2*(3), 33-42. Retrieved from: <u>http://beman.ase.ro/no23/3.pdf</u>
- Chiara, A. D., & Spena, T. R. (2011). CSR strategy in multinational firms: focus on human resources, suppliers and community. *Journal of Global Responsibility, 2*(1), 60–74. DOI: 10.1108/20412561111128528
- Cohen, E. (2017). CSR for HR: A Necessary Partnership for Advancing Responsible Business Practices. Routledge.
- Eswaramurthi, K., & Mohanram, P.V. (2013). Value and Non- Value Added (VA / NVA) Activities Analysis of a Inspection Process – A Case Study. *International Journal of Engineering Research and Technology 2*(2). Retrieved from: <u>https://www.ijert.org/research/value-and-non-value-added-va-nva-</u> <u>activities-analysis-of-a-inspection-process-a-case-study-IJERTV2IS2522.pdf</u>
- Fleaca, E., Fleaca, B., & Maiduc, S. (2018). Aligning Strategy with Sustainable Development Goals (SDGs): Process Scoping Diagram for Entrepreneurial Higher Education Institutions (HEIs). *Sustainability 10*. <u>https://doi.org/10.20944/preprints201801.0140.v1</u>
- Furterer, S. (2009). Lean Six Sigma in Service: Applications and Case Studies. CRC Press.
- Lindberga, C.F., Tanb, S., Yanb, J., Starfelt. (2015). Key performance indicators improve industrial performance. *Energy Procedia* 75, 1785-1790. https://doi.org/10.1016/i.egypro.2015.07.474
- Looy, A. V., & Shafagatova, A. (2016). Business process performance measurement: a structured literature review of indicators, measures and metrics. *SpringerPlus* 5(1). <u>https://doi.org/10.1186/s40064-016-3498-1</u>
- Michael, L.G. (2003). Lean Six Sigma for Service: How to Use Lean Speed and Six Sigma Quality to Improve Services and Transactions. McGraw-Hill.
- Pearson, S. (2014). Value Stream Mapping: Definition, Steps and Examples. Retrieved from <a href="https://tallyfy.com/value-stream-mapping/">https://tallyfy.com/value-stream-mapping/</a>
- Pless, N. M., & Maak, T. (2005). Relational Intelligence For Leading Responsibly In A Connected World. *Academy of Management Proceedings*, 2005(1). <u>https://doi.org/10.5465/ambpp.2005.18783524</u>
- Pless, N.M., & Maak, T. (2012). Responsible leadership. New York, NY: Springer.
- Rosca, P.A, Badulescu, A., & Bac, D.A. (2018). Employee Engagement A Cornerstone for Building a Culture of Sustainability. In *Proceedings of the 12<sup>th</sup> International Management Conference "Management Perspectives in the Digital Era"*. Retrieved from <u>http://conferinta.management.ase.ro/archives/2018/pdf/4\_4.pdf</u>

- Sridevi, J. (2015). Corporate Social Responsibility Towards Women Empowerment. International Journal of Administration and Governance 1(5), 35-37. Retrieved from: <u>https://ssrn.com/abstract=2797739</u>
- Sustainable Development Goals Knowledge Platform (2015). Sustainable Development Goals. Retrieved from <u>https://sustainabledevelopment.un.org/?menu=1300</u>
- Vodafone (2019). Vodafone Sustainable Business Report 2019 Data supplement. Retrieved from

https://www.vodafone.com/content/dam/vodcom/sustainability/pdfs/datasupplement-2019.pdf

Vodafone Group Plc (2019). Vodafone Group Plc Sustainable Business Report 2019. Retrieved from

https://www.vodafone.com/content/dam/vodcom/sustainability/pdfs/susta inablebusiness2019.pdf