

How works process oriented Agile CPW Subject Object Relationship Diagram Modeling with the CPW Process Method?

Bernd J. Schneider

IC Informatica Consulting GmbH

Zurich, Switzerland

Email: Bernd.Schneider@ICInformaticaConsulting.com

URL: [http:// www.cpw-method.com](http://www.cpw-method.com)

17 August 2018

Abstract. With the process oriented Agile CPW Subject Object Relationship Diagram Modeling with the CPW Process method is introduced, how from a Business Process with the CPW Method step by step in an Agile Way a CPW Subject Object Relationship Diagram can be created.

1. Agile CPW Process Method Modeling

The question as to how process oriented Agile CPW Subject Object Relationship Diagram Modeling with the CPW Process method is made, is first of all introduced Agile CPW Process Method Modeling or Agile Process Method Modeling with the example of the Coffee Shop [7].

Introduced are only some parts of the end to end process how a Client comes into the Coffee Shop, expresses his wishes, decides for a special coffee, after that he pays, and then he takes the coffee and leaves the Coffee Shop.

The following Figure 1 shows the first process steps, when the Client comes into the Coffee Shop.

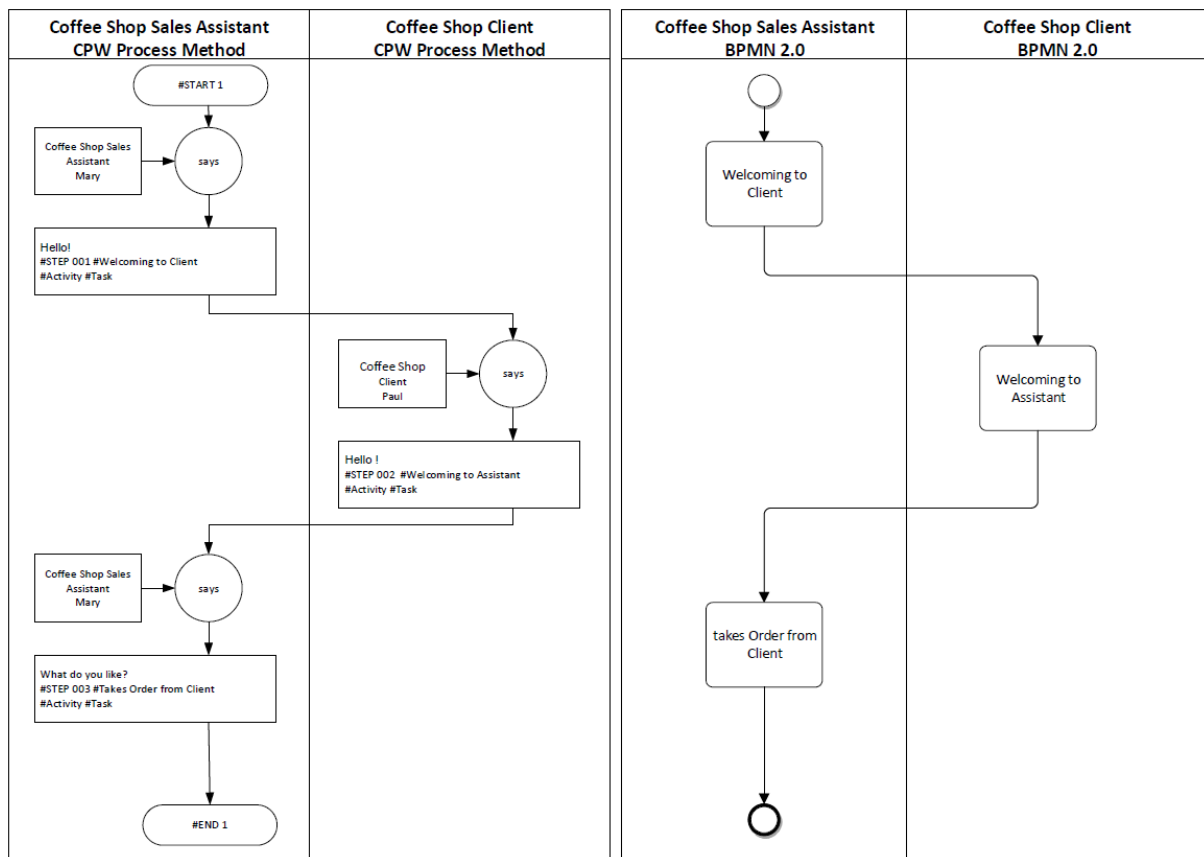


Fig. 1: Representation of the Business Process Coffee Shop with the process steps Welcome and Questions to the Client.

In the above representation you see in the left two columns the representation of the Coffee Shop Process with the CPW Process method [1] and in the two right hand columns the representation with the BPMN 2.0 [9].

There are only three represented process steps, but it is enough to explain a few things.

First of all is introduced the process steps with the CPW Process method [1].

In the Swimlane with header of the left column are described the process steps of the Coffee Shop Sales Assistant and in the adjacent column the process steps of the Coffee Shop Client.

In the above representation of Figure 1 you see in the two left hand columns the representation of the Business Process Coffee Shop with the CPW Process method

[1], and which is represented accordingly to the CPW Process method: The CPW Process is represented as simple sentence with a CPW Subject, a CPW Predicate and a CPW Object [1,2,6].

At the represented process step as CPW Process, is the process in the conventional sense represented as CPW Predicate in the context of the responsibility with the CPW Subject and the process result with the CPW Object [1,2,6].

At the first process step is the CPW Subject not only the Coffee Shop Sales Assistant, but also there is a concrete name, namely: Mary. What you also see is, that the CPW Process at this process step first of all is represented in direct speech [2,3] as follows: CPW Subject: #Coffee Shop Sales Assistant #Mary, CPW Predicate: #says, CPW Object: #Hello [4,5].

Furthermore at this process step of the CPW Process, represented in direct speech [2], the CPW Process has been abstracted as a function in the next row within the corresponding CPW Object, and is represented with the #Notation inclusive process step number as follows: #STEP 001 #Welcoming to Client [4,5]. This abstraction level of the described function is also used then to describe on the right side the process step of BPMN 2.0 [9]. The described process step of BPMN 2.0 is an Activity and Task [9]. On the left side at the CPW Process the described process step of BPMN 2.0 as Activity and Task is described with #Notation in the next row of the corresponding CPW Object as follows: #Activity #Task. The described #Notation of #Activity #Task has been taken from the list of CPW Logical Layer BPMN 2.0 [8,9]. In the list of CPW Logical Layer BPMN 2.0 you can represent a major part of BPMN 2.0 [8,9].

In the following representation Figure 2 are described further process steps of the business process Coffee Shop. The represented process steps show among others how you represent a Selection with the CPW Process method and then how this Selection is represented with BPMN 2.0 as Gateway [8,10].

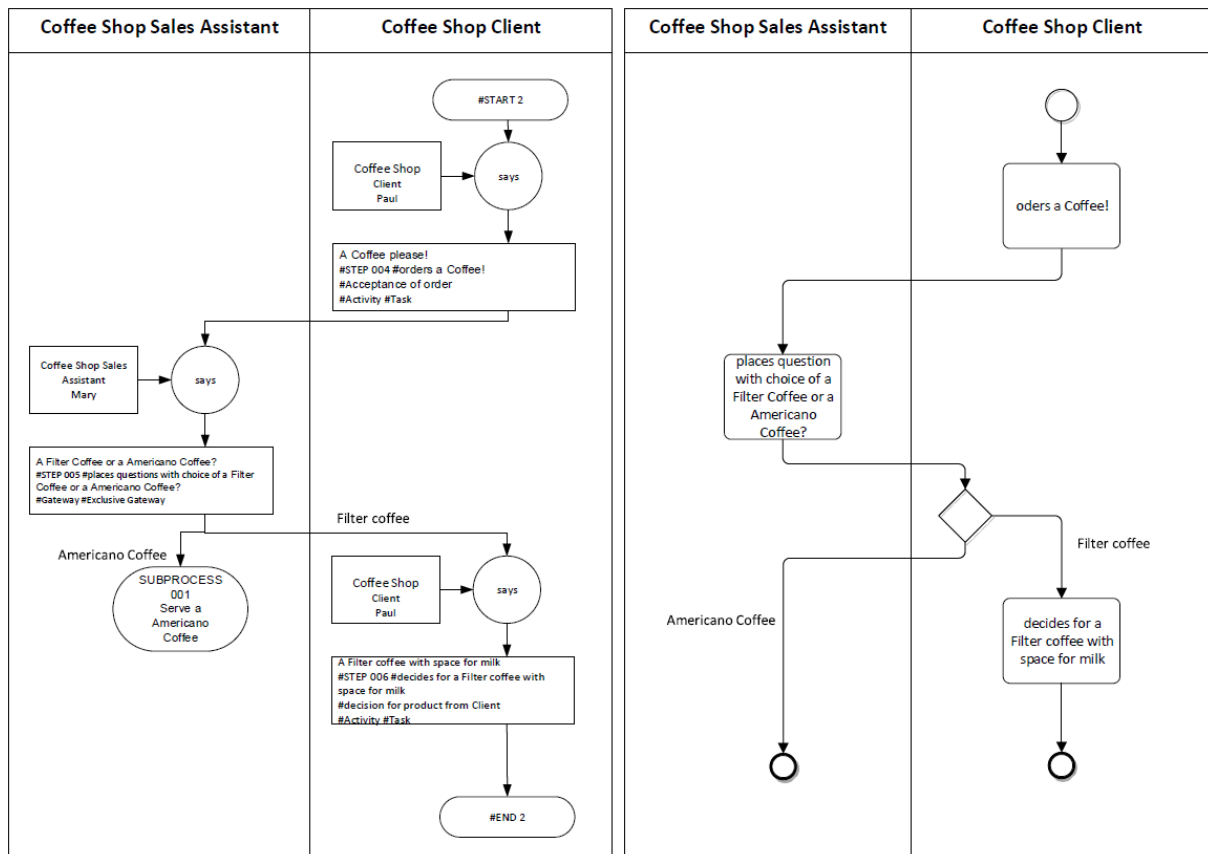


Fig. 2: Representation of the Business Process Coffee Shop with further process steps and with represented Selection and Subprocess.

As described in Process Step #STEP 005 with the CPW Process, the Coffee Shop Sales Assistant asks the question, which initiates the Selection with a question at the process step of the CPW Process [4,5].

The decision Either Or as Exclusive Or is represented on the one hand with the CPW Process method with a process step of #STEP 006 for the case, that the Coffee Shop Client decides for a Filter Coffee [4,5].

For the case, that the Coffee Shop Client decides for an Americano Coffee, is called with the CPW Process method a SubProcess: SUBPROCESS 001: Serve an Americano Coffee.

On the right side you see how the process steps are described with BPMN 2.0 [10] with the Gateway. If the Coffee Shop Clients decides for a Filter Coffee is this described by the use of an Activity and Task [9] and if the Coffee Shop Clients decides for an Americano Coffee you see at the BPMN 2.0 only an End Point [11],

but at the End Point can be continued and called the Subprocess: Serve an Americano Coffee [12].

Also here in the process step #STEP 005 of the CPW Process the question respective the Selection is represented with the CPW Logical Layer BPMN 2.0 [5,8] as follows: #Gateway #Exclusive Gateway, where then the Gateway as Exclusive Gateway is represented with BPMN 2.0 [10].

2. Representation of the CPW Process in Tabular Format as CPW Process Level I

In the following representation Figure 3 is represented the CPW Process with the example Coffee Shop with several process steps as CPW Process Level I [1,2,3,4,5]. The CPW Process Level I has been taken one-to-one from the graphical representation of the CPW Process from Figures 1 and 2. The CPW Process Level I can be described in direct speech, but it is not a must, and describes at the example Coffee Shop the dialogue between #Coffee Shop Sales Assistant and #Coffee Shop Client. But in this case at the CPW Process Level I is described the dialogue between #Coffee Shop Sales Assistant and #Coffee Shop Client in direct speech.

#STEP No	SWIMLANE FUNCTION/ RESPONSIBILITY	CPW Process Level I #PROCESS STEP #CPW Subject - PROCESS STEP RESPONSIBILITY #CPW Subject - PROCESS STEP RESPONSIBILITY NAME #CPW Predicate #CPW Object	#CPW Subject Level I PROCESS STEP RESPONSIBILITY	#CPW Subject Level I PROCESS STEP RESPONSIBILITY NAME	#CPW Predicate Level I PREDICATE OR RELATIONSHIP	#CPW Object Level I PROCESS RESULT
#START 1						
#STEP 001	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #Mary #says #Hello!	Coffee Shop Sales Assistant	Mary	says	Hello!
#STEP 002	Coffee Shop Client	#Coffee Shop Client #Paul #says # Hello !	Coffee Shop Client	Paul	says	Hello!
#STEP 003	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #Mary #says #What do you like?	Coffee Shop Sales Assistant	Mary	says	What do you like?
#END 1						
#START 2						
#STEP 004	Coffee Shop Client	#Coffee Shop Client #Paul #says #A Coffee please!	Coffee Shop Client	Paul	says	A Coffee please!
#STEP 005	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #Mary #says #A Filter Coffee or a Americano Coffee?	Coffee Shop Sales Assistant	Mary	says	A Filter Coffee or a Americano Coffee?
#STEP 006	Coffee Shop Client	#Coffee Shop Client #Paul #says #A Filter coffee with space for milk	Coffee Shop Client	Paul	says	A Filter coffee with space for milk
#SUBPROCESS 001						
#END 2						

Fig. 3: Representation of the CPW Process in Tabular Format as CPW Process Level I from the example Coffee Shop.

In the first Column from left are the Process Numbers (#STEP No.) of the process steps of the CPW Process.

Then in the second column is described the responsibility of the process step (SWIMLANE - FUNCTION/ RESPONSIBILITY). Generally is this also the CPW Subject of the CPW Process.

In the next column is described the CPW Process in the #Notation and can be read as simple sentence with a CPW Subject, a CPW Predicate and a CPW Object.

(CPW Process - Level I - #PROCESS STEP - #CPW Subject - PROCESS STEP RESPONSIBILITY - #CPW Subject - PROCESS STEP RESPONSIBILITY NAME #CPW Predicate #CPW Object).

In the next two columns are described the responsibilities as CPW Subjects. First is described the responsibility with the CPW Subject as Function (#CPW Subject Level I - PROCESS STEP RESPONSIBILITY) and then in an extra column the responsibility is listed with a concrete name (#CPW Subject Level I - PROCESS STEP RESPONSIBILITY NAME).

In the next column is described the CPW Predicate (#CPW Predicate Level I – PREDICATE OR RELATIONSHIP) of the represented CPW Process.

And then in the last column is described the CPW Object (#CPW Object Level I - PROCESS RESULT) of the represented CPW Process.

Overall describes the represented CPW Process the dialogue between #Coffee Shop Sales Assistant and #Coffee Shop Client and consists here of Welcome, Questions and Answers, and Decisions of the Client regarding the product [1,2,3,4,5].

3. Representation of the CPW Process in Tabular Format as CPW Process Level II

In the following representation Figure 4 is represented the CPW Process with the example Coffee Shop with several process steps as CPW Process Level II [1,2,3,4,5]. The CPW Process Level II is derived from the CPW Process Level I. The described dialogue of the CPW Process Level I in direct speech is dissolved and is abstracted. Furthermore in addition the process step, represented through the CPW Process Level II, is described through an abstract Function, like listed in the last column (CPW Function – FUNCTION), which is then taken one-to-one, to describe the process steps of BPMN 2.0 [9,10,11,12]. The abstract Function is represented in the #Notation as Logical Layer [4,5], and the abstract Function is also listed in the graphical representation of the CPW Process in the CPW Object as #Notation in Figure 1. Furthermore are the process steps of the CPW Process are assigned to the CPW Logical Layer BPMN 2.0. On the one hand is the CPW Logical Layer BPMN 2.0 listed in the table of the second-last column (CPW Logical Layer BPMN 2.0) [8] and on the other hand in the graphical representation of the CPW Process in the CPW Object of Figures 1 and 2.

#STEP No	SWIMLANE FUNCTION/ RESPONSIBILITY	CPW Process Level II #PROCESS STEP #CPW Subject - PROCESS STEP RESPONSIBILITY #CPW Subject - PROCESS STEP RESPONSIBILITY NAME #CPW Predicate #CPW Object	CPW Subject Level II PROCESS STEP RESPONSIBILITY	CPW Predicate Level II PREDICATE OR RELATIONSHIP	CPW Object Level II PROCESS RESULT	CPW Logical Layer BPMN 2.0	CPW Function FUNCTION
#START 1							
#STEP 001	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #says #welcome to Client	Coffee Shop Sales Assistant	says	welcome to Client	#Activity #Task	#Welcoming to Client
#STEP 002	Coffee Shop Client	#Coffee Shop Client # says #welcome to Assistant	Coffee Shop Client	says	welcome to Assistant	#Activity #Task	#Welcoming to Assistant
#STEP 003	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #asks #for Client wishes	Coffee Shop Sales Assistant	asks	for Client wishes	#Activity #Task	#Takes Order from Client
#END 1							
#START 2							
#STEP 004	Coffee Shop Client	#Coffee Shop Client #Paul #orders #a Coffee	Coffee Shop Client	orders	a Coffee	#Activity #Task	#orders a Coffee! #Acceptance of order
#STEP 005	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #asks #the Client with choice of a Filter Coffee or a Americano Coffee?	Coffee Shop Sales Assistant	asks	the Client with choice of a Filter Coffee or a Americano Coffee?	#Gateway #Exclusive Gateway	#places questions with choice of a Filter Coffee or a Americano Coffee?
#STEP 006	Coffee Shop Client	#Coffee Shop Client #decides #for a Filter coffee with space for milk	Coffee Shop Client	decides	for A Filter coffee with space for milk	#Activity #Task	#decides for a Filter coffee with space for milk #decision for product from Client
#SUBPROCESS 001							
#END 2							#Serve a Americano Coffee

Fig. 4: Representation of the CPW Process in Tabular Format as CPW Process Level II from the example Coffee Shop.

4. Representation of the CPW Process in Tabular Format as CPW Process Level III

In the following representation Figure 5 is represented the CPW Process with the example Coffee Shop with several process steps as CPW Process Level III [1,2,3,4,5]. The CPW Process Level III is derived from the CPW Process Level I and the CPW Process Level II.

In the CPW Process Level III, wherein the CPW Process is represented as simple sentence, the CPW Subject, the CPW Predicate and the CPW Object are even more abstracted. Furthermore in addition is searched to the found abstract formulations further generic terms and abstract terms, to incorporate them into the formulations of the CPW Objects. If there are found several generic terms, they can also be put into brackets, so that the simple sentence represented as CPW Process is still readable with a CPW Subject, a CPW Predicate and a CPW Object [6].

#STEP No	SWIMLANE FUNCTION/ RESPONSIBILITY	CPW Process Level III #PROCESS STEP #CPW Subject - PROCESS STEP RESPONSIBILITY #CPW Subject - PROCESS STEP RESPONSIBILITY NAME #CPW Predicate #CPW Object	#CPW Subject Level III PROCESS STEP RESPONSIBILITY	#CPW Predicate Level III PREDICATE OR RELATIONSHIP	#CPW Object Level III PROCESS RESULT	CPW Logical Layer BPMN 2.0
#START 1						
#STEP 001	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #does #the welcome to the Client	Coffee Shop Sales Assistant	does	the welcome to the Client	#Activity #Task
#STEP 002	Coffee Shop Client	#Coffee Shop Client #does #the welcome to the Assistant	Coffee Shop Client	does	the welcome to the Assistant	#Activity #Task
#STEP 003	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #asks #Question for Client wishes	Coffee Shop Sales Assistant	asks	Question for Client wishes	#Activity #Task
#END 1						
#START 2						
#STEP 004	Coffee Shop Client	#Coffee Shop Client #orders #the product Coffee	Coffee Shop Client	orders	the product Coffee	#Activity #Task
#STEP 005	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #asks #the Client with choice of product type Filter Coffee or a Americano Coffee?	Coffee Shop Sales Assistant	asks	the Client with choice of product type Filter Coffee or a Americano Coffee?	#Gateway #Exclusive Gateway
#STEP 006	Coffee Shop Client	#Coffee Shop Client #decides #for Filter coffee (product type) with space for milk (product type attribute)	Coffee Shop Client	decides	for Filter coffee (product type) with space for milk (product type attribute)	#Activity #Task
#SUBPROCESS 001						
#END 2						

Fig. 5: Representation of the CPW Process in Tabular Format as CPW Process Level III from the example Coffee Shop.

5. Creation of the CPW Subject Object Context Diagram Clusters

These results are now enough to create the first draft of the CPW Subject Object Context Diagram.

To create the CPW Subject Object Context Diagram is used especially CPW Process Level III, wherein to the described process steps with the CPW Processes also have been defined the generic terms in the CPW Objects.

To create the overall CPW Subject Object Context Diagram, are created one to several Clusters, the so-called CPW Subject Object Context Diagram Clusters. Have you created enough CPW Subject Object Context Diagram Clusters, it can be created then from these the overall CPW Subject Object Context Diagram. The objective is with a created CPW Subject Object Context Diagram Cluster to cover one to several process steps from the CPW Process Level III. In principle there are created so many CPW Subject Object Context Diagram Clusters until all process steps of the complete end to end process of the CPW Process Level III are covered.

Here is described the further approach: At the creation of the first CPW Subject Object Context Diagram Cluster you consider, what is the overriding purpose or also the overall objective of the End to End Business Process? In this case there are the Business Processes of the Coffee Shop or more concrete here it is the Coffee Shop Order Management within the Coffee Shop. With the found CPW Objects with Coffee Shop and Coffee Shop Order Management is now the next question: Who is responsible for this? Or who is responsible for what? In the example Coffee Shop with Coffee Shop Order Management is this the Coffee Shop Sales Assistant and the Coffee Shop Client [1].

Now are all CPW Objects and CPW Subjects complete to create the first CPW Subject Object Context Diagram Cluster.

The following representation Figure 6 shows the first CPW Subject Object Context Diagram Cluster:

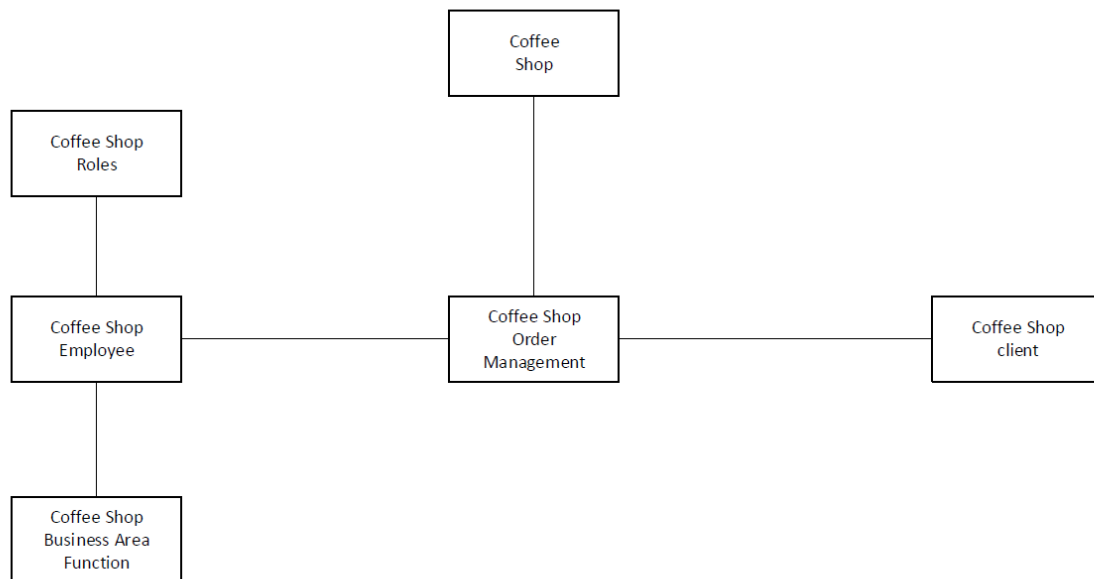


Fig. 6: Representation of the first CPW Subject Object Context Diagram Cluster from the example Coffee Shop with the CPW Object Coffee Shop and CPW Object Coffee Shop Order Management and with the CPW Subject Coffee Shop Employee and CPW Subject Coffee Shop Roles and CPW Subject Coffee Shop Business Area Function and in addition with the CPW Subject Coffee Shop Client.

In the middle is the CPW Object Coffee Shop and is the CPW Object Coffee Shop Order Management. On the right side is the CPW Subject Coffee Shop Client. And on the left side are abstracted and generalized the terms once again, so that there have been created the CPW Subject Coffee Shop Employee with a relationship to Coffee Shop Roles and with a relationship to Coffee Shop Business Area Function, so that then the Coffee Shop Sales Assistant can be assigned to the Coffee Shop Employee, and the CPW Subject Coffee Shop Roles is assigned the Assistant and the Coffee Shop Business Area is assigned the Coffee Shop Sales.

In the next step is repeated the approach. It is always taken one to several process steps from the CPW Process Level III, and it is tried through the found generic and abstract terms to find the CPW Subjects and CPW Objects, so that you can create

then the next CPW Subject Object Context Diagram Cluster. Normally you can summarize one to several process steps of the CPW Process Level III to a topic, so that you can create again the next CPW Subject Object Context Diagram Cluster according to a topic. The approach is repeated as long as until all process steps of the End to End Business Process of the CPW Process Level III have been covered. Furthermore you have to consider, how the relationships are to the found CPW Subjects and CPW Objects and furthermore, which attributes can be assigned to the CPW Subjects and CPW Objects, and how are their characteristics. Among others is again and again a very important attribute the status of a process step of the CPW Process Level III, which can be assigned then to a CPW Object of a CPW Subject Object Context Diagram Cluster.

In the following representations Figures 7,8, 9 and 10 are represented the further created CPW Subject Object Context Diagram Clusters from the End to End Business Process of the CPW Process Level III of the Coffee Shop and Coffee Shop Order Management:

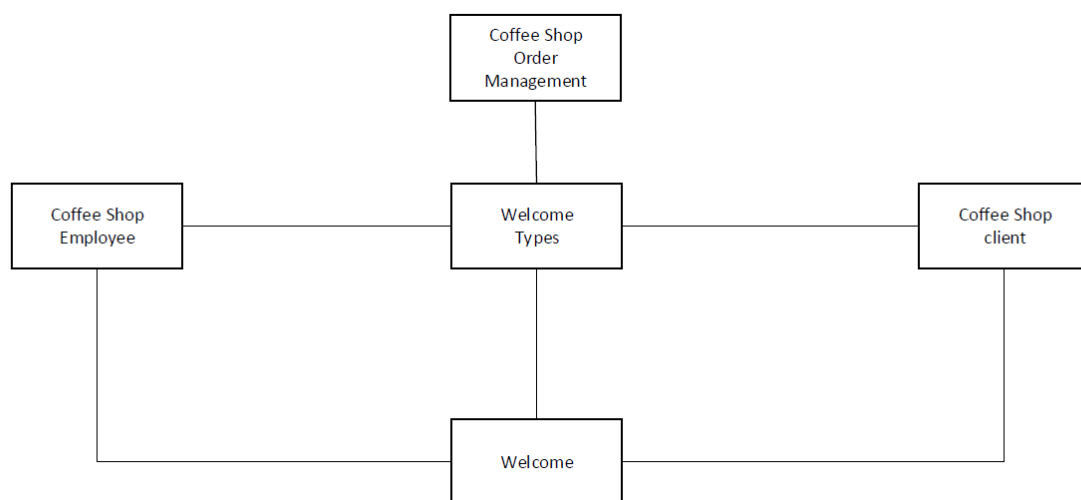


Fig. 7: Representation of the next CPW Subject Object Context Diagram Cluster from the example Coffee Shop with the additional CPW Object Welcome Types and CPW Object Welcome.

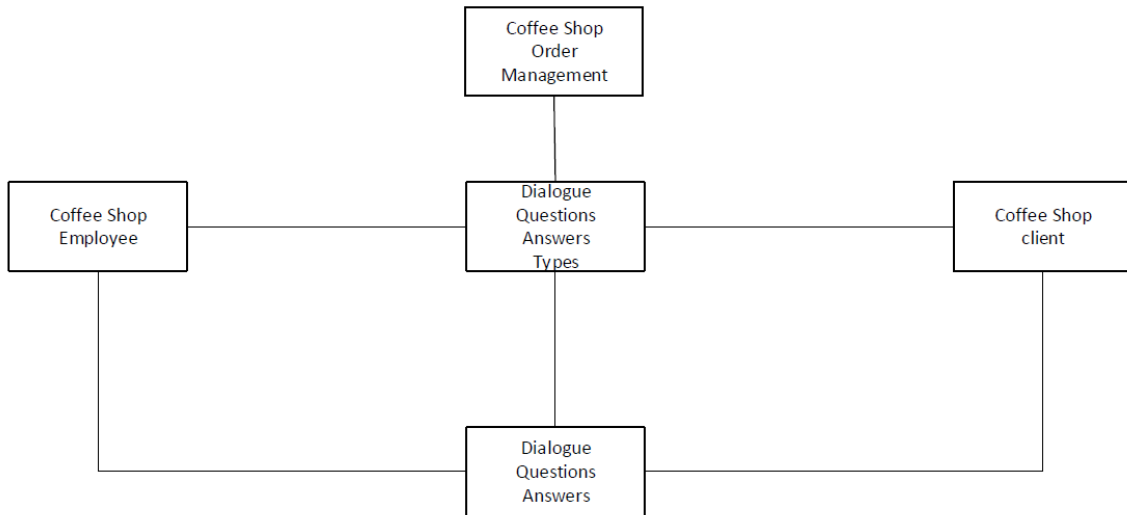


Fig. 8: Representation of the next CPW Subject Object Context Diagram Cluster from the example Coffee Shop with the additional CPW Object Dialogue Questions Answers Types and the CPW Object Dialogue Questions Answers.

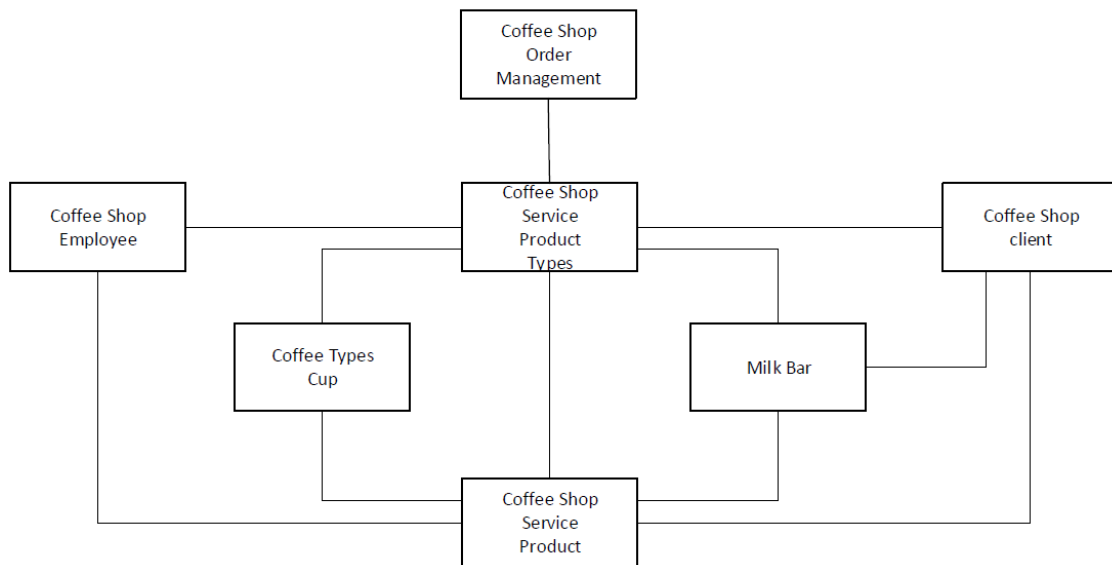


Fig. 9: Representation of the next CPW Subject Object Context Diagram Cluster from the example Coffee Shop with the additional CPW Object Coffee Shop Service Product Types and CPW Object Coffee Shop Service Product and CPW Coffee Types Cup and CPW Object Milk Bar.

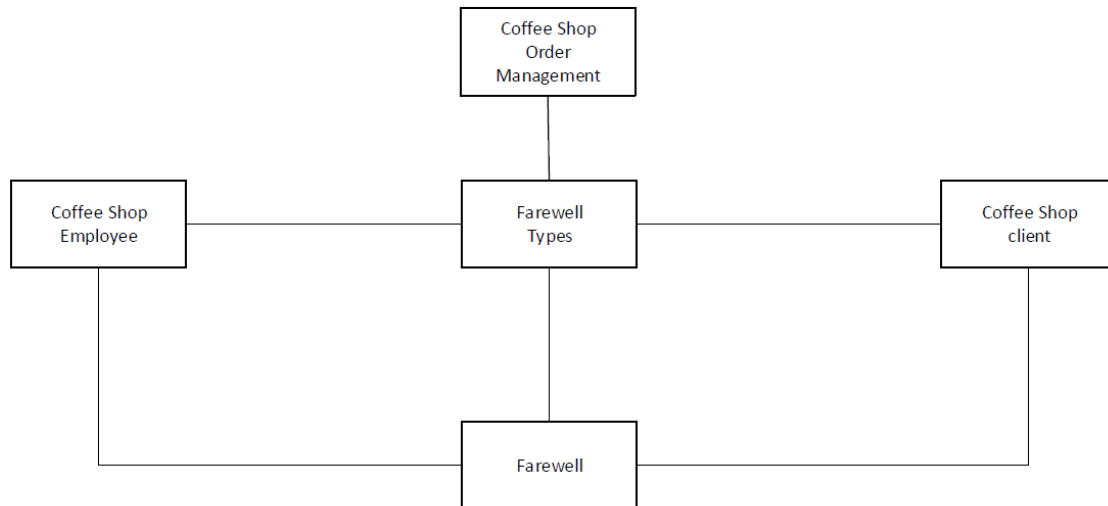


Fig. 10: Representation of the next CPW Subject Object Context Diagram Cluster from the example Coffee Shop with the additional CPW Object Farewell Types and CPW Object Farewell.

6. Creation of the Overall CPW Subject Object Context Diagram

With the so far created CPW Subject Object Context Diagram Clusters it is now possible to create the Overall CPW Subject Object Context Diagram for the End to End Business Process of the CPW Process Level III of the Coffee Shop Order Management.

The following representation Figure 11 shows the Overall CPW Subject Object Context Diagram for the Coffee Shop Order Management of the End to End Business Process of the CPW Process Level III:

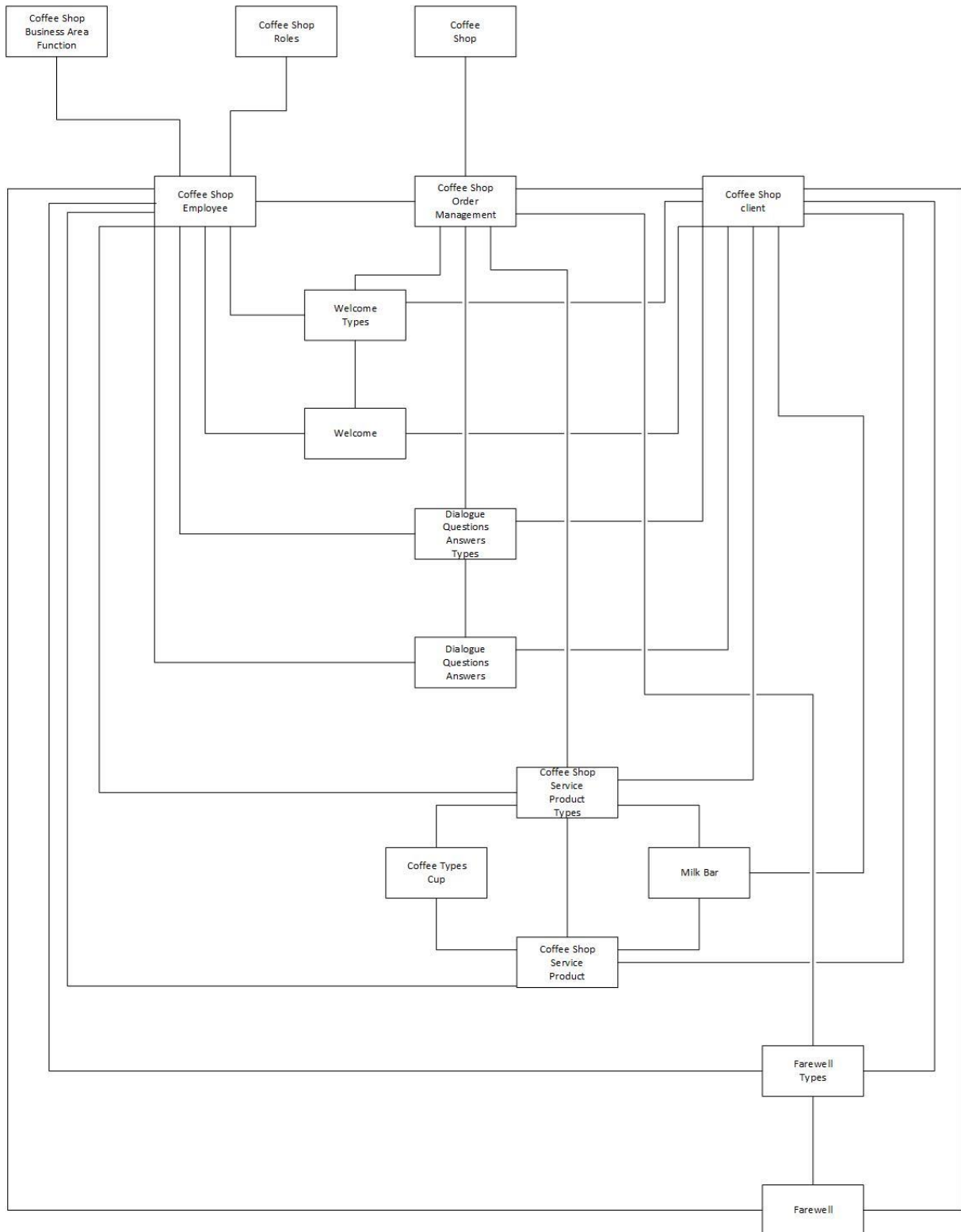


Fig. 11: Representation of the Overall CPW Subject Object Context Diagram from the example Coffee Shop.

7. Representation of the CPW Process in Tabular Format as CPW Process Level III with the additional Columns of Attribute Channels

In the following representation Figure 12 the CPW Process Level III approach is refined, sophisticated and verified with the additional columns of #CPW Subject Level III Attribute Channel (#CPW Subject Level III - Key Terms - Key Terms with Characteristics - CPW Subject - CPW Subject with attributes and characteristics - Attribute Channels) and #CPW Object Level III Attribute Channel (#CPW Object Level III - Key Terms - Key Terms with Characteristics - CPW Object - CPW Object with attributes and characteristics - Attribute Channels). In the column #CPW Subject Level III Attribute Channel are listed all found terms, or generic or abstract terms with their attributes and characteristics. The same is also for the column #CPW Object Level III Attribute Channel, where also here all found terms, or generic and abstract terms with their attributes and characteristics are listed.

STEP No	SWIRL/STEP FUNCTION/ RESPONSIBILITY	CPW Process Level III PROCESS STEP CPW Subject - PROCESS STEP RESPONSIBILITY CPW Subject - PROCESS STEP RESPONSIBILITY NAME CPW Predicate CPW Object	CPW Subject Level III PROCESS STEP RESPONSIBILITY	CPW Subject Level III Key Terms Key Terms with Characteristics CPW Subject CPW Subject with attributes and characteristics Attribute Channels	CPW Predicate Level III PREDICATE JOB RELATIONSHIP	CPW Object Level III PROCESS RESULT	CPW Object Level III Key Terms Key Terms with Characteristics CPW Object CPW Object with attributes and characteristics Attribute Channels	CPW Logical Layer BPMN 2.0
START 1								
STEP 001	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #does #the welcome to the Client	Coffee Shop Sales Assistant	Coffee Shop Sales Assistant	does	the welcome to the Client	Welcome	#Activity #Task
STEP 002	Coffee Shop Client	#Coffee Shop Client #does #the welcome to the Assistant	Coffee Shop Client	Coffee Shop Client	does	the welcome to the Assistant	Welcome	#Activity #Task
STEP 003	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #asks #Question for Client wishes	Coffee Shop Sales Assistant	Coffee Shop Sales Assistant	asks	Question for Client wishes	Question	#Activity #Task
END 1								
START 2								
STEP 004	Coffee Shop Client	#Coffee Shop Client #orders #the product Coffee	Coffee Shop Client	Coffee Shop Client	orders	the product Coffee	product Coffee	#Activity #Task
STEP 005	Coffee Shop Sales Assistant	#Coffee Shop Sales Assistant #asks #the Client with choice of product type Filter Coffee or a Americano Coffee?	Coffee Shop Sales Assistant	Coffee Shop Sales Assistant	asks	the Client with choice of product type Filter Coffee or a Americano Coffee?	product type Filter Coffee product type Americano Coffee	#Gateway #Exclusive Gateway
STEP 006	Coffee Shop Client	#Coffee Shop Client #decides #for Filter coffee (product type) with space for milk (product type attribute)	Coffee Shop Client	Coffee Shop Client	decides	for Filter coffee (product type) with space for milk (product type attribute)	product type Filter coffee product type Filter coffee with product type attribute space for milk	#Activity #Task
#SUBPROCESS 001								
END 2								

Fig. 12: Representation of the CPW Process in Tabular Format as CPW Process Level III with the additional Columns of Attribute Channels.

8. Creation of the CPW Subject Object Relationship Diagram

Are all between steps are done, you can begin with the creation of the CPW Subject Object Relationship Diagram.

Whereby the order of the steps can be regarded as Agile or also Iterative or it can be possible to skip certain steps, where it makes sense for the analyst. It is within the discretion of the analyst, which steps of the phases are more important and which steps the analyst is doing first.

To create the CPW Subject Object Relationship Diagram, are considered now all relationships of the CPW Process Level III of the end to end process of the Coffee Shop Order Management. In every process step of the CPW Process Level III of the CPW Process is looked how the relationship is of the CPW Predicate between the CPW Subject and the CPW Object, and this relationship with the CPW Predicate is transferred then into the current Overall CPW Subject Object Context Diagram, until then it develops step by step a complete and acceptable CPW Subject Object Relationship Diagram. In some cases you realize, that in the CPW Subject Object Relationship Diagram at a relationship between a CPW Subject and a CPW Object it is possible to assign one to several CPW Predicates. This can be named as more dimensional relationship and the reason for this is, because the more dimensional relationship covers one to several process steps with the different CPW Predicates of the CPW Process Level III.

The following representation Figure 16 shows the CPW Subject Object Relationship Diagram [7] for the Coffee Shop Order Management:

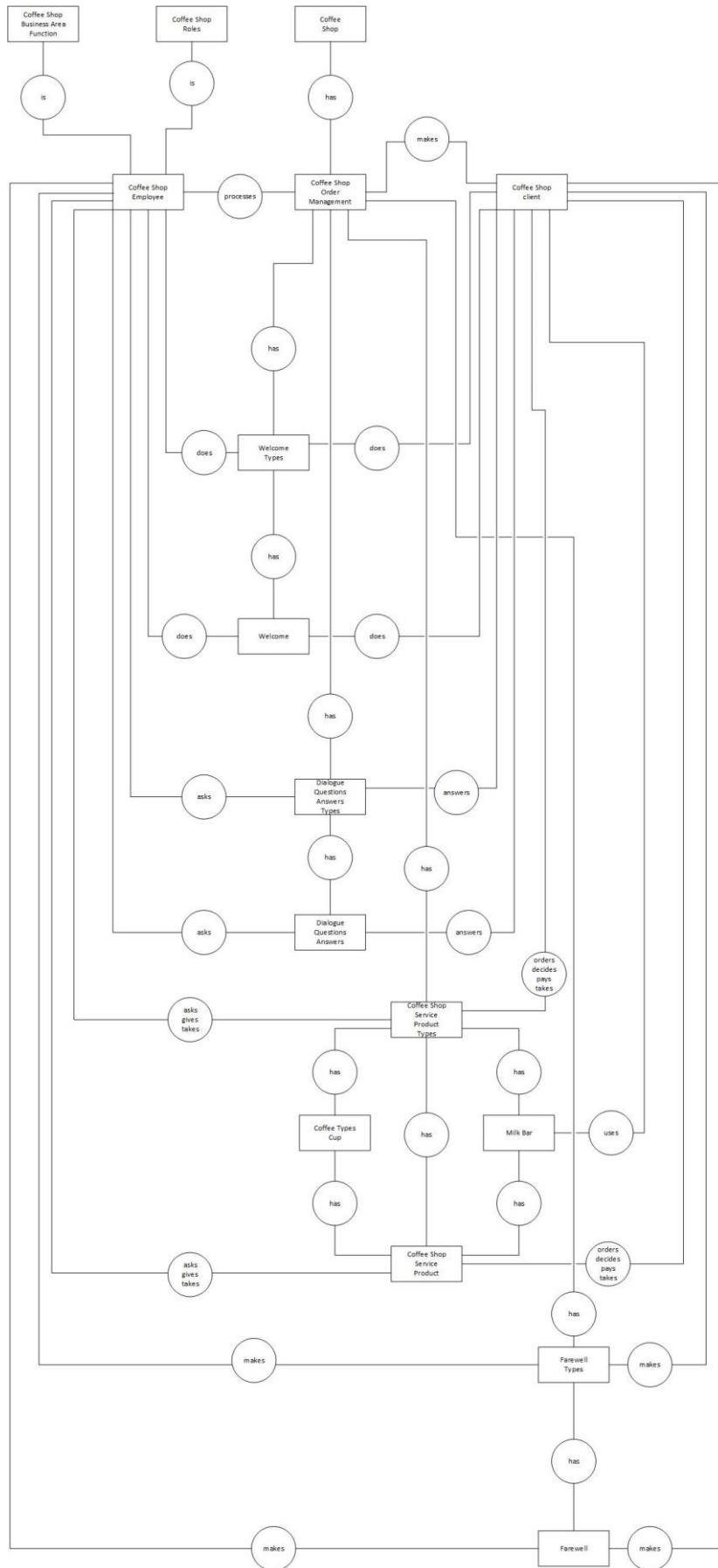


Fig. 16: Representation of the CPW Subject Object Relationship Diagram for the Coffee Shop Order Management.

9. Transformation of the CPW Subject Object Relationship Diagram into the Entity Relationship Diagram

After the creation of the CPW Subject Object Relationship Diagram can be transformed the results into an Entity Relationship Diagram, so that there can be developed a logical Entity Relationship Diagram [7,13,14,15].

10. Summary

In this article has been shown how process oriented Agile CPW Subject Object Relationship Diagram Modeling works with the CPW Process method [7].

But it has been also introduced Agile CPW Process Method Modeling or Agile Process Method Modeling. It has been shown, how the CPW Process has been represented in a graphical representation, and wherein the CPW Process is represented as simple sentence with a CPW Subject, a CPW Predicate and a CPW Object [1,2,6].

Furthermore has been also shown, how the process steps of the CPW Process has been represented in direct speech and as a dialogue, and overall how the particular process steps have been represented as abstract function with #Notation and Logical Layers in the CPW Object of the CPW Process [1,2,3,4,5].

In addition the Process Steps of the CPW Process are assigned to the CPW Logical Layer BPMN 2.0 [8].

In further steps the CPW Process has been represented in Tabular Format as CPW Process Level I, CPW Process Level II and CPW Process Level III.

The CPW Process Level I is characterized, that the CPW Process can be represented in direct speech, the CPW Process Level II can be used among others through the level of abstract representation for the representation of BPMN 2.0, and the CPW Process Level III is used for the creation of the CPW Subject Object Context Diagram Clusters and of the Overall CPW Subject Object Context Diagram, to create at the end the CPW Subject Object Relationship Diagram.

As said before, with the CPW Process Level III has been created the CPW Subject Object Context Diagram Clusters with the objective to create the Overall CPW Subject Object Context Diagram.

And after these steps and results can be created from the CPW Process Level III and the overall CPW Subject Object Context Diagram then the CPW Subject Object Relationship Diagram.

At the end the created CPW Subject Object Relationship Diagram can be also transformed among others into an Entity Relationship Diagram [7,13,14,15].

11. Conclusion

With the process oriented Agile CPW Subject Object Relationship Diagram Modeling and the Agile CPW Process Method Modeling with the CPW Process method [1,2,3,4,5,7,8] is introduced a method approach how Business Process Reengineering [16] can be developed and transformed in an agile way.

References

1. CPW Method. CPW Process method. Available: <http://www.cpw-method.com>.
2. Schneider, Bernd. Method, System and Program Product for Modeling with CPW Method. U.S. Patent 13/986,242 filed April 15, 2013, and issued October 16, 2014.
3. Schneider, Bernd. Method and Apparatus for Modeling with CPW Method applicable in an Application System. U.S. Patent 12/312,671 filed May 16, 2009, and issued April 29, 2010.
4. Schneider, Bernd.: How to represent the logical layers from the different categories with Hashtag #Notation with the CPW Process method?. (February 2016). Available: www.cpw-method.com.
5. Schneider, Bernd.: How to represent the logical layers from the different categories with Hashtag #Notation with the CPW Process method and with extended possibilities?. (June 2016). Available: www.cpw-method.com.
6. Schneider, Bernd.: How to interpret the CPW Process with the simple sentence?. (June 2016). Available: www.cpw-method.com.

7. Schneider, Bernd.: How to transform a CPW Subject Object Relationship Diagram into an Entity Relationship Diagram ERD?. (June 2016). Available: www.cpw-method.com.
8. Schneider, Bernd.: CPW Process method with #Notation and CPW Logical Layer BPMN 2.0. (June 2016). Available: www.cpw-method.com.
9. Business Process Model and Notation (BPMN) Version 2.0. (January 2011). 10.2.3 Tasks. OMG. pp. 156-165. Available: <http://www.omg.org/spec/BPMN/2.0/PDF>.
10. Business Process Model and Notation (BPMN) Version 2.0. (January 2011). 10.5.2 Exclusive Gateway. OMG. pp. 290-292. Available: <http://www.omg.org/spec/BPMN/2.0/PDF>.
11. Business Process Model and Notation (BPMN) Version 2.0. (January 2011). 10.4.3 End Event. OMG. pp. 246-249. Available: <http://www.omg.org/spec/BPMN/2.0/PDF>.
12. Business Process Model and Notation (BPMN) Version 2.0. (January 2011). 10.2.5 Sub-Process. OMG. pp. 173-183. Available: <http://www.omg.org/spec/BPMN/2.0/PDF>.
13. Chen, P. (1983) English Sentence Structure and Entity-Relationship Diagram. Information Sciences, Vol.1, No. 1, Elsevier, May 1983, Pages 127-149. Available: [https://doi.org/10.1016/0020-0255\(83\)90014-2](https://doi.org/10.1016/0020-0255(83)90014-2) [20 May 2003].
14. Chen, P. (1997) English, Chinese and ER diagrams. Data & Knowledge Engineering, Vol. 23, No. 1, June 1997, Pages 5 -16. Available: [https://doi.org/10.1016/S0169-023X\(97\)00017-7](https://doi.org/10.1016/S0169-023X(97)00017-7) [12 May 1998].
15. Chen P. (2002) Entity-Relationship Modeling: Historical Events, Future Trends, and Lessons Learned. In: Broy M., Denert E. (eds) Software Pioneers. Springer, Berlin, Heidelberg.
16. Davenport Thomas H. (1992) Process Innovation: Reengineering Work Through Information Technology. Harvard Business Press.