



What is a Unique Functional Requirement?

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Introduction

IFPUG CPM definition of an Elementary process –

“An elementary process is the smallest unit of activity that is meaningful to the user(s). It must be self-contained and leave the business of the application being counted in a consistent state”

In order to be counted as a single EP it must be “Unique” . IFPUG define the criteria for uniqueness as the EP must have :

- *the processing logic is different from any other elementary process and/or*
- *data elements and /or Data Groups accessed are different from any other elementary process*

However whilst this rule is simple to apply it often causes confusion in determining whether two similar transactions are in fact two independent unique EPs or a single EP which has a business rule that will vary how it behaves under certain circumstances.

The definition for functional size measurement (ISO14143-1) is: that functional size is “A size of software derived by quantifying the *functional user requirements*”

So whenever we are deciding what *can* be counted and what *cannot* be counted we always have to determine whether the ‘variation’ is a separate and unique *functional* requirement of the user. Just looking at the number of rules invoked and DETs and FTRs accessed is an excellent guide to an indication that a variation in the users requirements may in fact be a separate unique EP but it is not sufficient in all cases. We need to investigate the *Users View* of the two ‘candidate’ EPs to see if they are unique or are they a single EP with one or more variations.

Below is an alternative approach that takes the Users view into consideration in addition to the current existing rules. You can use the table to check each of the candidate 'similar' processes to determine if they are in fact:

- o two separate *unique EPs* = **score < 4**
- o one EP which has *variations.* = **score ≥ 4**

Question	One EP	Two EPs
<p>Do the Candidate Elementary Processes have processing logic (business rules, algorithms, calculations editing or validation rules) that is identical ?</p> <p>Note: Processing logic is 'user defined' and defines what the function delivers not 'how' it is delivered. It is <i>not</i> different code to deal with different technical implementations.</p> <p>Score : YES = 1 NO = 0</p>	<p>YES (but not always)</p> <p>Would expect it to be identical but could have processing logic that is only 80% the same for both candidate processes.</p> <p><i>Eg. Create Employee - , the salaried employee may have rules that vary from the contractor employee, but over 80% of the rules are generic to both.</i></p>	<p>MAYBE</p> <p>In rare cases the two candidate EPs have identical processing logic.</p> <p><i>Eg. May be identical when the User specifies two reports that display exactly the same fields ie. Name, Type and Description. One report may be for Customers and the other may be for Product. The reports look identical but are the result of two different functional requirements .</i></p>
<p>Do the Candidate Elementary Processes, - process the same prescribed set of data element types or are they different?</p> <p>Score: YES = 1 NO = 0</p>	<p>YES (but not always)</p> <p>Would expect DETs to be identical but could be only 80% the same for both candidate processes</p> <p><i>Eg. In the above example the Salaried employee has an overtime field and the rate at which overtime is paid. The contractor employee has contract type and projected end date.</i></p>	<p>MAYBE</p> <p>Could have identical DETs but most likely that it is different by at least 20%.</p> <p><i>Eg. Create Customer and Modify Customer have identical DETs that cross the boundary but satisfy a different functional requirement from a User View.</i></p>
<p>Do the Candidate Elementary Processes, - access the same prescribed set of logical files or are they different?</p> <p>Score : YES = 1 NO = 0</p>	<p>YES (but not always)</p> <p>Would expect FTRs to be identical but could be only 80% the same for both candidate processes.</p> <p><i>Eg. In the above example when the Employee is a contractor the EP needs to Access the contracts file to ensure that the Contract Type is valid. This is not required for the salaried Employee</i></p>	<p>MAYBE</p> <p>Could have identical FTRs but most likely that it is different by at least 20%.</p> <p><i>Eg. In the aboe example, the Create Customer and Modify Customer access identical FTRs</i></p>
<p>Is there a unique user specified requirement for each Candidate Elementary Process, such that they occur independently of, and for different business reasons, than the other EP?</p> <p><i>Eg. the users have an expectation to be able to execute each candidate EP independently of the other similar and related candidate EP. Ie, they will select it specifically to occur, such that they will navigate to a separate screen or menu option and in a non-computerised</i></p>	<p>NO (but not always)</p> <p>.</p> <p><i>Eg. The View Jobs Calendar process is used by Manager to identify gaps so that they can schedule jobs for their employees. Public holidays are blocked out in Red. The View Jobs Calendar is also used by the admin department to check which days have been allocated by</i></p>	<p>YES</p> <p><i>Eg. The Order form is printed to be shipped with the Order such that it can be used to check if goods have been picked and delivered correctly. The online Order Enquiry is used by the staff when a User calls to check the status of their order.</i></p>

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<p>system this process would have a name and its own set of business procedures.</p> <p>Score : YES = 0 NO = 1</p>	<p>their management as being official public holidays so they can notify the canteen to cancel milk deliveries.</p>	
<p>If the Users business requirements changed then it would be expected that one of the Candidate EPs would be required to change independently of the other similar candidate EP?.</p> <p>le Users would require Logic, DETs or FTRs could be changed independently the other candidate EP. Over time the two candidate EPs are like to become less similar.</p> <p>If the above is true Score : YES = 0 NO = 1</p>	<p>NO (but not always) .</p> <p>Eg. <i>The new employment regulations require employees to be paid Superannuation into an account of their choice. The Create Employee process no requires that the Employees superannuation fund by named when the Employee is created. This is not relevant if the Employee is a contractor.</i></p>	<p>YES</p> <p><i>Eg. In Release 2 of the Order system the Users have asked if the person who 'picked' the order is printed on the delivered Order. The online order is to display the status of the order (pending, complete, paid, delivered).</i></p>
<p>Did the User documents the :</p> <ul style="list-style-type: none"> o the User Functional Requirements such that they specified each candidate EP separately o the User Manual such that the two candidate EPs were identified separately <p>If either the above is true Score : YES = 0 NO = 1</p>	<p>NO (but not always) .</p> <p>Eg. <i>The View Jobs Calendar process is used by Manager to identify gaps so that they can schedule jobs for their employees. The View Jobs Calendar is also used by the admin department to check which days have been allocated by their management as being official public holidays and have been blocked out in Red.</i></p>	<p>YES</p> <p><i>Eg. The Order form is printed to be shipped with the Order such that it can be used to check if goods have been picked and delivered correctly. The online Order Enquiry is used by the staff when a User calls to check the status of their order.</i></p>