R&D DASHBOARD SUPPORT

Background

The use of dashboards has been spreading throughout R&D organizations. Management needs the ability to step back from the details and see the bigger, complete picture. Dashboards or cockpits with the right information perform that function. From tracking project performance to the latest number of reported field defects, dashboards aim to provide a quick, comprehensive snapshot of how well an organization, business unit, or project is performing.

The challenge in dashboard design is to create an easy-to-read, informative, relevant report. It is difficult enough to construct a single chart that clearly communicates information to your executives; with a dashboard you attempt to integrate multiple sources of information such that the whole is greater than the sum of the parts.

Dashboards are not "one size fits all," and care must be given to their design. Getting too little or too much data is easy, identifying the relevant data and converting it to meaningful information for everyone is the challenge. By customizing the exact set of graphs and tables for specific groups of executives, R&D managers can ensure the dashboard is as effective as possible.

Our offering

We help you to build a dashboard that are aligned with your specific R&D goals, derive together with you specific targets that help meeting these goals and develop KPI definitions including measurement constructs for each target. As some R&D goals and target areas are often identical to similar organizations, we are able to re-use existing KPIs, saving you time and money.

Once the definitions are baselined, their implementation should be step-wise performed, finding the right balance between ambition level and organizational readiness. Support during this implementation phase is normally beneficial to you, assuring that common pitfalls are avoided.

For further information

Please contact us at T: +41 33 733 4682 or E: info@se-cure.ch.

Typical phases for “R&D Dashboard Support”.

R&D Goals								Plan			Design			Test			Operation			Innovation			
Increase post-release quality	Improve schedule adherence	Improve design-to-cost adherence	Reduce time-to-market	Improve system architecture	Extend product lifecycle	Increase innovation level	Targets	Plan Validation Ratio	Schedule Performance Index	Cost Performance Index	Design-to-Cost Performance Index	Prevention/Appraisal Index	Requirements Volatility Index	Re-Use Ratio	Software System Complexity	System Churn Index	Requirements-to-Test Coverage Ratio	Test Automation Ratio	Software Defect Density	Feature Usage Ratio	Product Lifecycle Ratio	Development Effort Ratio	Innovation Level Ratio	Research Productization Index	Patent Success Index
	+	+					Improve schedule/effort/cost estimates																		
	P						Detect schedule deviations early																		
	o						Detect budget deviations early																		
		P					Detect design-to-cost deviations early																		
+	o		+			+	Increase (early) defect detection																		
	+						Limit scope changes																		
+	o		+			+	Increase level of re-use																		
+	o		+	P		+	Reduce system complexity																		
+	o		o		+		Limit software/hardware changes																		
+							Improve test coverage																		
+	o		+	+		+	Improve system testability																		
P			+		+	+	Decrease defect injection																		
o	o		+			+	Decrease level of non-contributing features																		
					P		Increase product life expectancy																		
	o		P			+	Reduce cost of non-quality																		
						P	Focus on products with new features																		
							Increase idea-to-product performance																		
						+	Increase number of cash-generating patents																		

P: primary impact
+: strong impact
o: medium impact

Snapshot showing example of relation between goals, targets and KPIs.