



CMMI Institute

DEFINING OPERATIONS OF SOFTWARE DELIVERY CENTER COMBINING PRINCIPLES OF CMMI AND ITIL

NAME: Dipankar Chakrabarti

TITLE: Executive Director-Advisory Risk & Quality Leader

ORGANIZATION: PricewaterhouseCoopers Pvt. Ltd, India



**CAPABILITY
COUNTS 2017**

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PROBLEM STATEMENT

- To design a new Software Delivery Center (SDC) – to service repetitive and regular components of any SDLC assignments
- Focus was to make the center highly efficient, scalable through fungible resources and cost optimized while delivering high quality.
- No readymade model was available to create a ground-up high quality SDC – meeting our requirement

APPROACH

- CMMI Dev & SVC were obvious choice as we achieved ML5 in 2011 and have continued to mature
- Initial discussion with Business showed deficiencies like service cataloging, SLA measurement process, financial management of SDC, optimized capacity management, SPOC management and such other requirement
- CMMI Dev and SVC combination were useful but we needed to retrofit through ITIL components.

APPROACH

- Basic Services Design was taken from CMMI SVC model
- Construction, Testing of software component is integral part of SDC - Engineering processes of CMMI Dev model is used
- Retrofitted Catalog, Capacity, Service Desk management from ITIL framework
- Created a hybrid model to support quality from Pursuit to Delivery

OPERATING MODEL

- Existing
 - Lumped delivery center – Pursuit Management, Analysis, Design, Construct, Testing, AMS from one entity
 - Resources are straitjacketed under one Sub-unit/Competency
 - Higher delivery cost, low leverage and utilization ratio
 - High cost of quality

OPERATING MODEL

- Target
 - Identification of repetitive and regular tasks in SDLC and segregate in SDC – Service Catalog
 - Creating fungible resource pool cutting across all Sub-units/Competencies – better mobility of employee
 - High quality delivery with better leverage and utilization ratio
 - Contained cost of quality

CDSI HYBRID MODEL - I

- Created a base model as framework in the Service Level Agreement between business and SDC – 5 support process areas of CMMI (CAR, CM, DAR, MA, PPQA) are considered – this helped us to draft a quality SLA between Business and SDC
- SLA has clearly defined KPIs and process of measurement and reporting of those

CDSI HYBRID MODEL - 2

- 5 PA s of Process Management (OPD, OPF, OPM, OPP, OT) helped us to define guiding principles of Collaboration between Business and SDC.
- To define point of contact model we took help of ITIL Service Strategy component.
- Document provides clear guideline on exchange of information between Business and SDC

CDSI HYBRID MODEL - 3

- SDC Internal Operations Management is based on Service Establishment and Delivery PAs with focus on SCON, SD, SSD, SST and STSM
- Added to that the 5 Engineering PAs from Dev to support SDLC processes (PI, RD, TS, VAL, VER)
- Retrofitted with Service asset and configuration management of ITIL framework for proper release management

CDSI HYBRID MODEL – 3A

- Specifically following tasks were retrofitted in the overall model
 - Development of strategies, policies and standards for IT services
 - Service Design
 - Day-to-day delivery of services and implementation of the service delivery processes
 - Monitoring and identifying ways to address issues and design service improvements

CDSI HYBRID MODEL - 4

- SDC Operations management manual was created through 8 out of 9 PAs of Project and Work Management (CAM, IWM, QWM, REQM, RSKM, SCON, WMC, WP) retrofitted with Service Design and Service Operations of ITIL with a special focus of Service Cataloging, Capacity Management, SLA Management, Service Desk - SPOC.

ARTEFACTS PREPARED

- Hybrid Model – to provide a ground up support for creation of a SDC
- Developed a toolset to identify services/delivery components should move to SDC (catalog). Independent of any Entity – this toolset can work
- Master Services Agreement based on the model defining processes, metrics and service levels for each type of services under SDC.

IDENTIFICATION OF SDC SERVICES

Service Attribute	Importance
Recurring and Repetitive	25
Skill Availability in market	15
Generic nature of service skillset	15
Ability to deliver through Fungible resources	10
Level of supervision required	10
Level of automation possible	10
Can be delivered through cross-training	15

ARTEFACTS PREPARED

- Created a dashboard for Senior Management on KPI from pursuit to delivery including supporting functions like risk management.
- A model for resource management including fungible resource planning.
- Analytics on the issue, resolution to measure mean time between resolution, defect leakage and testing efficiency.

KPI DASHBOARD

Dashboard

All Project Reports R&Q Dashboard Link Easy Query

Report Dashboard
Quality Index
0

2017-2018

- > IFR Report
- > IFR Notify Report
- > Checkpoint Reports
- > Client Survey Report
- > All New Projects
- > IFR Cycle

2017

KPI DASHBOARD





Financial Year: **2017-2018** Reporting Period: **May-2017**

Project Name:		Planned:	Upload EPT View EPT
Client Number:	2	Start Date:	14/Mar/2016
Project Number:	41	End Date:*	
Client Name:		Go-Live Date:	
Job Manager:		Effort: #*	0 (Person Hrs)
Job Manager 2:		Budget Rate: #*	(%)
Partner:	A	Contractor Fee: #*	INR(Lakh)
Job Partner 2:	M	Expenses To Be Booked: #*	INR(Lakh)
Contract Value:	INR (Lakh)	Expenses To Be Billed: #*	INR(Lakh)
Competency:	Advisory	Staff Cost: #*	INR(Lakh)
Project Type:	Contract	Engagement Margin: #*	INR (Lakh)
Industry:	H'Care	Engagement Margin: #*	(%)
Contract Type: #*	--Select--	Net Realization: #*	(Lakh/month)
Precision Time Booking Start Date:	04/Apr/2016	IOBM:*	INR(Lakh)
Last Time Booking Date:	07/Jul/2016		

To be filled from EPT * Mandatory fields **Initiate**

KPI DASHBOARD

Details of Actual Effort :

Current Designation	Planned Hours	PTD Hours	YTD Hours	MTD Hours
Partner/Executive Director	-	16		-
Director	-	-		-
Associate Director	-	48		-
Advisor	-	-		-
Sr Manager/Managing Consultant	-	-		-
Manager/Principal Consultant	-	-		-
Asst Manager/ Sr Consultant	-	700		-
Associate/Consultant	-	226		-
Analyst/Officer	-	-		-
Trainee	-	-		-
Retainer	-	-		-
Total:	0	990	0	0

Data source: EMIS. The effort figures for PTD and MTD for last financial year may not represent the current levels of staff. YTD effort figures are for current levels of staff.

The effort values in this section are derived based on period end dates whereas the total PTD/YTD effort values for Revenue calculations, as displayed in the Financial Parameters section, are derived based on period entry dates.

BENEFITS

- The new model helped us to create an efficient quality delivery system
- More collaboration x-function
- Better utilization – up by 7%
- SDC measurements under control
- Happy Customer and Happy Employee.

Thank You

dipankar.Chakrabarti@in.pwc.com

