Credit Architecture Programme (CAP) and Central Limit System(CLS)

**June 19, 2018**

**Credit Architecture Programme (CAP) Overview**

Radical change to certain parts of the credit-end-to-end process required. Process redesign leveraging on new technology architecture, eliminate waste and remove low value add/ duplicate activities. Operating model changes for scale and effectiveness.

**Technology**

* Redesigned integrated technology with complete workflow, integrated into the core banking solution.
* Multi-parameter algorithms for routing, exception management and approval functionality.

**Process Redesign**

* Move away from the assembly line view of processes but at the same time ensure that process steps are organized in a natural order.
* Standardize and reduce variability in the underwriting process Risk effort/decisions geared to the truly important elements of the deal or complex deals.
* Eliminate waste – clear separation between administrative and risk-related work, reducing breaks/ handoffs.
* Reduce instances of deals ultimately failing after spending significant time in the pipeline.

**Operating Model**

* Explore opportunities to centralize, group together activities for scale and effectiveness (better controls).

**Central Limit System (CLS) Overview:**

**Central Limit System** (CLS) serves as a single source of truth in providing accurate, complete and real time limits and collateral information globally in a consolidated and integrated manner. Within CAP, CLS will serve as the Global Limit Controller, comprising of the following components

1. A **database** for Limits, Collaterals and Covenants
   1. To store regionally agreed limit and collateral attributes
2. Suitable **APIs** to interface with the database
   1. To Create, Amend, Delete and View
   2. To receive, limit utilization updates from various transaction processing systems, real time or near real time
   3. To handoff, individually or in batch, downstream
   4. To provide relevant reports
3. A **rules engine** to perform limit checks of various kinds e.g. based on utilization, based on collateral value, against RAL or global limits (e.g. Industry, Country)

CLS contains all limit structures. The limit structure can also be sync-ed to the stand-alone limit systems if required (e.g. MLC/low credit exposure systems) CLS contains latest up-to-date limit data (approved/activated/utilized), except the utilization for low IBG credit exposure products which is refreshed at T+1, and for PCE/SET utilization, it is up-to-date till last 1 hour (intra-day hourly update)

# **Evolution**

1. I joined DBS Project in Feb 2017 as a Developer. At first, I was very skeptical about the project. As this was my first experience in BFS Sector. Earlier I only had chance to work in Travel and Analytics Domain. After working in this Sector, I strongly agree that I am very fortunate. Not even DBS was cooperative, whenever I required IBM’s support the management staff was very prompt in answering my queries.
2. IBM and DBS partnership are very old. From the day when DBS got IBM’s mainframe technology to boost their banking services. Now era has changed, IBM is not only a Mainframe Tech giant for DBS but it has given DBS an idea to enhance their software using latest technology available in the market. No questions for IBM to be involved in this journey of ‘transformation’ of a normal bank to a latest tech savvy bank.
3. CAP-CLS program is one of the most talked program in DBS. In CAP-CLS we leverage the latest technology with AGLIE development to develop cost effective, highly tested and less maintainable software that can change the future of banking. The end user for this program is a relationship manager, who can upfront see all-in-one dashboard called as credit workbench(CWB) (a dashboard for relationship managers to get a 360-degree view of all the required banking services under one roof), where CLS will be integrated to give the globe view for collaterals and Limits.
4. Started with the development of Reference Codes on the fly from UI using the latest technology i.e. Angular 4.0 and REST Web services. However, development of reference code was just the starting, we went on and developed highly anticipated banking product ‘Collaterals’, using our developed product it is very easy to create and modify a collateral. We started with Guarantee as collateral and with the quality of software we have delivered, we have developed Deposit, Vehicle, Vessel, Property and Others type of collaterals in mere 3 months of time and from which Guarantee, Others and Property collateral is now Production Ready. From Angular 4.0 to creating Jenkins pipeline to dev ops. I can call myself as a ‘Full Stack Developer’.
5. As like Collaterals, Limits are also very important part of banking industry. As technology is moving rapidly, DBS have decided to move away from Angular to a very latest technology called as ‘Web components’. Limits UI has been developed in couple of months and is ready for production as well. From last couple of weeks, we were involved in integrating Collaterals UI and Limits UI to CWB.
6. As of now, collaterals and limits both are integrated in CWB with maker-checker functionality. The RMs will now be able to create, update and withdraw collaterals as well as create, update, close, freeze/unfreeze and add/modify utilization for limits from CWB with access matrix. The production deployment will happen at the end of this month. It’s a big achievement for IBM to be a part of this development from the starting.