

Innovate & Sustain

A close look at annual reports of TDB / DST / DeITY & other R&D funding organisations shows that Innovation has happened & technologies developed but we don't see Indian products in the market place.

Problem is not innovation but an ecosystem to sustain & nurture what is developed in India.

For TCOE to succeed & for investors to invest we need success stories.

What we Need is “A sustenance strategy”.



An Opportunity where Coral can help

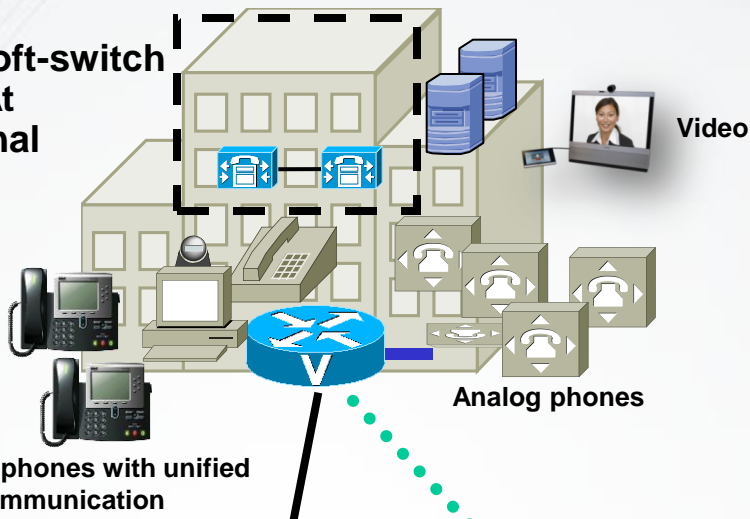
“Enterprise communication” or PBX are shifting to IP platform. New requirements are for Unified Communication incorporating

1. Integrated outlook express so that one can “Click to call” while working on emails.
2. Features like Voice mail /Presence/ IM / Chat / Corporate directory integration / Desktop sharing / Collaborative working are a part.
3. “Audio / Video Conference” solutions.
4. Soft phones that work from mobiles & PCs.
5. Features like Integrated “Task system” for assignment, escalation & monitoring of Tasks .
6. Messaging service on private clients from smart phones / Laptops.
7. Integrated with Camera’s.
8. Email / Fax servers integrated with office E mail.

This is over Rs 1000 Crore market per annum



Central Soft-switch
At
Zonal



Rest of the World



Centralized administration of Features ,
calls details , message broadcast
Centralized Task control and task
management.
Network Management & Control.



Standard SIP architecture
that provides advantage of
cloud based switching &
low cost telephone devices
on most desks

Divisional Office



Existing Iris upgraded
To support IP

Existing Iris upgraded
To support IP



Presence / IM based services

Existing Iris upgraded
To support IP



How TCOE can add value

Understanding & validation of what is available & what customer requires

1. Validation of the available system for feature and its benchmarking against end customer requirements.
2. Testing on load & calculation of BHCA / BHCC.
3. Compliance of various standards.
4. Handle & resolve “In process memory processing issues”.

We have been supported by Dr Y N Singh Prof IITK. It helps resolve concepts.

Enrichment of platform

1. Support “peer to peer” communication, when end devices are behind proxy and not visible on VLAN. Understand issues & ensure devices are reached in real life by deployment of concepts like SBC / STUN / reverse NAT / Masquerading.
2. Encrypted calls with proprietary signalling & transcoding for enhanced security.
3. Minimise bandwidth requirement and ensure Delay & Jitter tolerant network for enhanced customer experience.
4. Move towards IMS architecture & HSS integration for converged platforms that will support LTE networks.
5. Cloud based Duplication & Redundancy of hardware / mirroring of database as “hot standby” for robust working with 1+N level of load sharing & redundancy.

Problems to be addressed

1. Customers' needs Key phones with direct station selection keys on single pair telephone wire that can go up to 1.5 Kms. IP phones on Ethernet has limitations of distance as well as local power especially in campus environment. Existing infrastructure has single pair twisted pair cable.
2. Integration of UHF / VHF sets so as to provide seamless communication over IP. SNR / Squelch / VOX & Silence suppression are challenges in such integration & sending these signals on SIP protocol extended layer.
3. Seamless integration with GSM femto for setting up private GSM networks that work seamlessly with enterprise PBX. Third party GSM BTS.

This is a low hanging fruit. Needs small investment of 3 Crore. Can cater to a 1000 Crore Indian mkt. Coral Can participate with manpower Technology & capital



Success would require a supportive ecosystem for Testing Validation & Promotion