

# TERABYTES

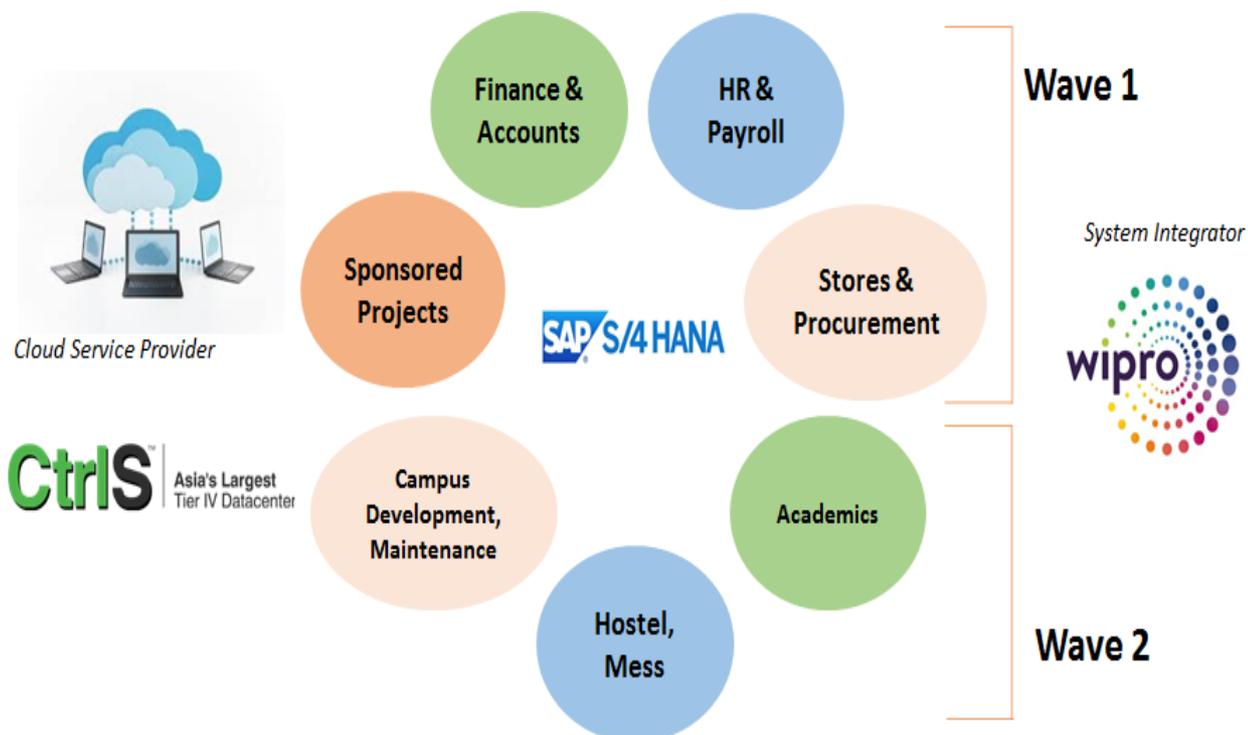
DIGITS NEWSLETTER, Issue 4

## Welcome to Issue No. 4 of TERABYTES!

DIGITS (Digital Campus and IT Services) Office is a unit set up by the Institute to plan and create a best-in-class information technology (IT) and networking system and implement agile IT and networking services for operational excellence in the Institute. "TERABYTES" is the newsletter published by DIGITS at regular intervals. The first three issues of TERABYTES were published in October 2017, April 2018, and October 2019. Welcome to this the fourth issue.

## FAQ: All you want to know about Project ISTAR

Project ISTAR (Implementing SAP S/4 HANA for Transforming Administration and Research) for ERP implementation commenced on February 15, 2018. The ERP licenses are being provided by SAP and the cloud services for implementing the solution are being provided by the company Ctrl-S. The implementation is being carried out by Wipro. The accompanying exhibit shows a high-level architecture of the ISTAR system



## DIGITS Website

DIGITS has launched a website and is continuously updating the website with content that will be helpful for all ongoing initiatives. Please look up <https://digits.iisc.ac.in>. Your suggestions and comments are most welcome.

## Subscription Based Broadcast

There is a long-felt need for streamlining the process of delivering broadcast emails so that users are not inundated with all varieties of broadcast emails. A subscription-based system has been implemented and will be launched anytime now. Under this scheme, there will be different categories of broadcast emails and each user will be able to *subscribe* to only those categories in which he/she is interested. Only the emails belonging to subscribed categories will be delivered to the mailbox of the user. However, all broadcast emails will be available in a portal and users would be able to access these by logging into the portal. DIGITS is also working on a standard list of “subject” headers so that individual users will be able to set up their own custom filters.

## FaRE (Faculty Reporting Environment)

DIGITS has designed and implemented a portal for faculty members to report their activities during a calendar year. The portal can be accessed using the faculty member's iisc.ac.in email account at: <https://fare.iisc.ac.in>. This portal will be extended in the future to enable faculty members to report their activities during any given time period. If the information is filled in and submitted for multiple years, the portal can be used to generate a pdf file that aggregates all the information for those years into a single pdf file.

## OPStaR (Online Portal for Staff Recruitment)

DIGITS has designed and implemented an online portal for prospective technical and non-technical staff applicants to upload their applications and all other documents required. OPStaR sends automatic acknowledgment to the candidates, prepares a single pdf file of the application package, and forwards the same to the Council Section. It also archives all the information for each recruitment exercise. It has been successfully deployed for recruiting Assistant Registrars and Deputy Registrars.

## 1. What is the overall implementation plan of Project ISTAR?

ISTAR is being executed in two waves:

- **WAVE 1:** Finance & Accounts; Sponsored Projects; HR & Payroll; Stores & Procurement
- **WAVE 2:** Academics; CCMD; Hostel & Mess Management.

WAVE 1 will go live by May 6, 2019 and Wave 2 is currently scheduled to go live in July 2019. Please look up [https://digits.iisc.ac.in/wp-content/uploads/2019/02/ISTAR\\_Feb21\\_2019.pdf](https://digits.iisc.ac.in/wp-content/uploads/2019/02/ISTAR_Feb21_2019.pdf) for more details on the functional modules being implemented.

## 2. How is the progress of the project being monitored?

Project ISTAR is being monitored every week by the OpsCom (Operations Committee) with the Registrar as Chair and the Financial Controller as Co-Chair. The overall project is reviewed every month by the **ExeCom** (Executive Committee) with DD (A&F) as Chair and DC-E ECS Division as Co-Chair. Registrar, IISc is the Project Director and Mr. Amit Chakraborty, Senior Information Technologist, is the Program Manager. All the committees report to Director, IISc and a subcommittee makes a presentation to the Director, IISc, almost every week.

## 3. What are the various milestones achieved so far in ISTAR implementation?

The ISTAR project was initiated on February 15, 2018. The following milestones have been achieved:

- Apr - Aug 2018: Developing Business Blueprint Documents for both Wave 1 and Wave 2
- Sep -Oct 2018: System Design and Development (realization of functionalities for Wave 1)
- Nov 2018: Conference Room Pilot
- Oct 2018 – Mar 2019: Master Data preparation
- Feb -Mar 2019: User Acceptance Testing (UAT); expected to be completed by March 31, 2019.

## 4. When will Wave 1 go live?

After the completion of UAT, the implementation team will prepare elaborately during April 2019 to set the stage for the **go-live** event which will happen on May 6, 2019. The go-live event will be preceded by a **blackout period** of 5 days during May 1-5, 2019. This is the time interval between the decommissioning of the existing legacy system and the activation of the new SAP system. During the blackout period, **cutover** activities happen. Cutover activities comprise tasks that have to be performed before the actual go-live, such as

- Migrating data: financial, projects, materials, leave balances, etc.
- Migrating open transactions from the legacy systems to S/4 HANA (open transactions are those which are still ongoing in the legacy system and need to be closed by the new system).

DIGITS has designed an online portal for prospective faculty members to upload their applications and all other documents and publications required. FReSH sends automatic acknowledgment to the candidates, prepares a single pdf file of the application material, and forwards the same to Council Section and all Departments concerned. After the concerned department completes the processing and uploads all relevant documents, FReSH archives all the information. FReSH also generates a single pdf file containing all the paperwork required for setting up a faculty selection committee. This portal will be launched soon.

### VISE (Video Security Equipment) - Phase 2

Phase 1 of the VISE project involved 26 cameras installed in 16 locations. The VISE committee headed by Prof. Venkatesh Babu has drawn up the specification for Phase 2 which includes 124 cameras in 70 locations. For operational purposes, Phase 2 has been grouped into two clusters:

- Phase 2A: This rides on the existing OFC (Optical Fibre Cable) backbone. Trenching and laying of conduits are the major work elements here.
- Phase 2B: This will require the new OFC ring to be in place. Trenching and laying of conduits will not be required.

A tender has been issued for Phase 2A and the procurement process is underway. It is expected that all the cameras will be installed and functional by July 2019.

### Online Processing of Ph.D. Thesis Evaluation through Scholar One

The DIGITS team worked with Clarivate Analytics (formerly Thomson Reuters) to customize the Scholar One Platform for online processing of Ph.D. theses. The tool was rolled out in October 2017. This tool has now stabilised after an initial year of continuous improvement. Remarkably, over a one year period, the tool has **halved** the cycle time from the submission of thesis to the receipt of the final report. The tool is being currently customised for processing M.Tech. (Research) dissertations as well.

### 5. What can we expect when the new system goes live?

It is natural that your expectations from the ISTAR project are very high indeed. There is a general perception that all transactions in the Institute will become completely paperless and will take almost zero time. Though these are dream goals, DIGITS would like to set realistic expectations. First of all, ISTAR will not eliminate paper. It will however minimize the use of paper to only those transactions where use of paper or signatures is a statutory requirement or is necessary because of the sensitive nature or high value of the transaction. It is to be noted that operational excellence is achieved through a combination of the following : (a) Well defined, nimble business processes (b) Change of mindset and investment of initial effort in users to shun inefficient legacy processes and adjust to the new processes (c) Cooperating with the implementing team to carry out thorough user acceptance testing (d) Prompt compliance with any sign-off or approval requirement that online implementation will require (for example, in the case of online course registration, if the course instructors or student advisors do not promptly approve the requests of the students, the online system gets stuck and may lead to automatic approvals beyond the deadline).

### 6. When will Wave 2 go live?

As per the schedule drawn up, wave 2 is expected to go live by July 2019. The Academics module in Wave 2 involves many challenges because of two reasons: (a) The SLCM (Student Life Cycle Management) module in the SAP system is a relatively new one and will need significant customisation. (b) IISc has certain unique requirements in its academics operations. A more realistic schedule for Wave 2 to go live is September/October 2019.

### 7. Are there some legacy systems that will be retained?

Fast and effective deployment of IT applications would invariably involve adjusting our processes to suit the workflow programmed in the IT application. While configuration and customisation are possible, we need to strike a lovely balance between degree of customization (and associated costs) and retention of legacy systems. We have exercised due diligence in choosing what functionalities to implement using SAP S/4-HANA system. We will have to retain legacy systems or other third party software to provide us with functionalities beyond the modules mentioned in Wave 1 and Wave 2. Examples of these include: health centre software, guest house software, security and safety systems software, thesis processing, recruitment, some aspects of students' admissions, etc. SAP allows a clean interface to third party software for input-output flow resulting in seamless integration with legacy systems.

### 8. Will there be any training sessions for the end users?

Selected users will be trained in batches during April 2019 with the expectation that they will in turn train their colleagues. We have already sent out to departments and centres, a request for faculty volunteers and office staff volunteers for training purposes. Extensive training material will be available on the DIGITS website.

## Maintenance of the Current IT and Networking Operations:

Since it would take another year or more for a fully operational implementation of the ISTAR project, there is a need to maintain the current IT and network services and third party software in a stable way. An IT services company *Integra Micro Systems* is helping DIGITS to run and maintain the following applications in cooperation with DIGITS: Admissions; Post-admissions Academic operations; Stores & Purchase; CSSP; Health Centre; Hostel & Mess Management; Azure services; Portals; and IISc website. Once the ERP system goes live, most of these services will be progressively withdrawn.

## Internet and Networking Infrastructure and Services

Single sign-on for all IT applications has been implemented for WiFi services, VPN connection, online course feedback, and for FARE. Eduroam services have been successfully implemented. A detailed plan has been drawn up for procuring equipment for a modern networked campus. The equipment is being procured through NICS (a subsidiary of NIC).

## Asset Data Creation

The ongoing ISTAR project requires an online database of equipment and furniture in each department and centre in the Institute. IISc departments have traditionally maintained an *Equipment Register* for this purpose and most departments/centres follow a manual process for this purpose. DIGITS has undertaken an elaborate process, under the guidance of Financial controller, Ms. Indumati Srinivasan, to create an online database of equipment and furniture for all departments and centres. This exercise has been completed in SERC, CSA, ECE, ESE, and EE departments. Currently, four departments under the Division of Mechanical Sciences, have been taken up. This initiative is likely to be completed by the end of April 2019.



During February 2019, UAT sessions were conducted in Lecture hall L9 where faculty members, admin officers, and admin staff participated. Two pictures are shown below.



On February 21, 2019, the DIGITS team made a presentation in the Faculty Hall to the admin officers, admin staff, and faculty members on the progress of the ISTAR project. A couple of photographs from the well attended session are shown below.



**Call for Volunteers:** Over the next one year, we expect full scale deployment of ERP services in the Institute. Before deploying these services, they have to be thoroughly tested and improved until users are satisfied with the user experience and correct functionality. This is a time-consuming task and we need a large number of volunteers to help us with this task. We require faculty volunteers, student volunteers, admin staff volunteers, and project staff volunteers. Those of you who wish to volunteer your time may please send mail to Mr. Amit K. Chakraborty, [amitc@iisc.ac.in](mailto:amitc@iisc.ac.in).

**Feedback:** Since many parallel initiatives are in progress, it is important for DIGITS to get candid feedback on these initiatives. For any questions, you may please contact: [office.digits@iisc.ac.in](mailto:office.digits@iisc.ac.in). For any specific questions regarding Active Directory implementation and email migration, please contact [emailsupport@iisc.ac.in](mailto:emailsupport@iisc.ac.in) and [networksupport@iisc.ac.in](mailto:networksupport@iisc.ac.in).

