Experiential Learning Lectures – I

INNOVATION

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The thought of owning a lecture series has been thrilling me for a long long time but could not gather courage to launch it for lack of both skills and the knowledge to do the same. Nonetheless, any mind pregnant of ideas has to deliver and it happens at the most opportune time, a time barely decided by the person himself. It so happened in this case as well. The launch of an unconnected book, MBA @16 by Subroto Bagchi was the last straw on the camel's back. When you find your love you know, the simple words, of icon of all times, Steve Jobs. I presume I found mine. I took the final plunge and thus was born the "Experiential Learning Lectures (ELL)". The brand name goes as "Face-off with Sanjay Sahay, A Thought Leader". The book MBA@16 has a chapter dedicated to me called the Facebook Faceoff and the name Face-off finds its origin from that context.

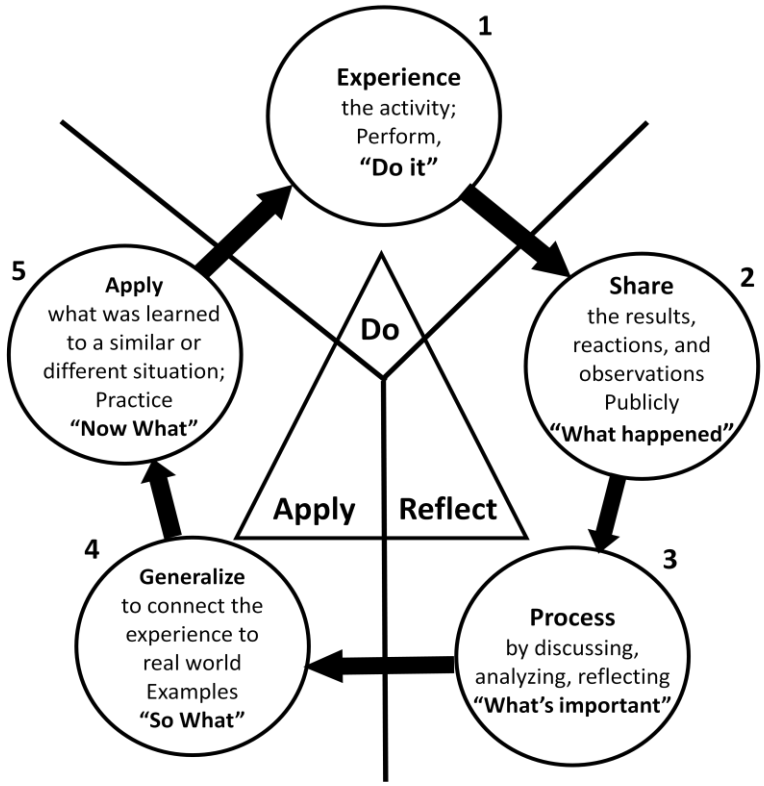
Why ELL

The natural question which comes to everyone's one mind is the use of an innovative system of learning, the Experiential Learning. This is based on the basic premise that experimental learning when imparted is the right blend of theories of management principles and the practitioners experience out of project execution. This thus turns out to be the best mode of learning at the decision making level. This system of learning also provides the new practitioners or entrepreneurs launching on their new ventures, the learnings of an expert and dynamic consultancy during the project period from the inception to the commissioning of the project. The self learning experience helps customization of the business model wherein the core issues remain the same and dynamic issues become either the value additions or provide the contextual framework to the project or both. As the ELL progresses, the Practitioners would become the ELL resource persons and which would help create a movement for this brand of learning, the real Project Management learning. The realm of this learning is comprehensive covering all important sectors of modern human existence and will thus help create a knowledge based society. We are moving towards a knowledge based world. Either we align or perish. In the words of John Dewey: " Experiential Learning take place when a person involved in an activity looks back and evaluates it, determines

what was useful or important to remember, and uses this information to perform another activity."

The most common theoretical construct of this method of learning is called the Experiential Learning Model. This model is a cyclical one with five linear activities finally ending up in a cycle at the end of which it refuels into another cycle of similar nature. The first activity as should be natural in this model is the EXPERIENCE , with the key concept of planning for discovery, the key orientation of the discovery being to explore, to examine, to construct and to arrange. The second stage is SHARE, the results, reactions and the observations publicly. Moving on to the third phase of this journey is the PROCESS itself, by discussing, the locking at the experience, analyze and finally reflect. GENERALISE, the fourth phase provides for the Experiential Learning to reach a level of a theory, to connect the world to the real world examples. And finally APPLY, what has been learnt to a similar or different situation and then put it into practice. In the center of this cycle is a triangle with three parts of DO, REFLECT and APPLY. The final theorem which emanates out of the Experiential Learning Model is to go through the experience, analyse it and use it right in a similar situation.

Experiential Learning Model



INNOVATION

Definition and History

What is Innovation? Innovation is the creation of better and effective products, processes, services, technologies, or ideas that are accepted by markets, governments and society. And Innovation is for whom? It is for the end user, who has been studied differently by large number of R&D and business development teams across the globe. It all starts with an idea. It's the innovators ability to combine ideas into in a unique way or to make useful association among ideas.

Innovation is derived from Latin word innovatus which means to renew or change. The first researcher Gabriel Tarde defines innovation as a series of 5 steps of acquiring knowledge, forming an attitude, the decision to adopt or reject, its implementation and the confirmation of the decision.

Innovation thus the process of taking new ideas to the end users, the word customer has a limited usage. The new knowledge gets converted into new product and services through this process. It creates value or adds to the already existing value and in the process increase efficiency leading to huge business development opportunity. "Without innovation, new products, services, and new ways to doing business would never emerge, and most organizations would be forever stuck doing the same old things the same old way."

Principles of Innovation

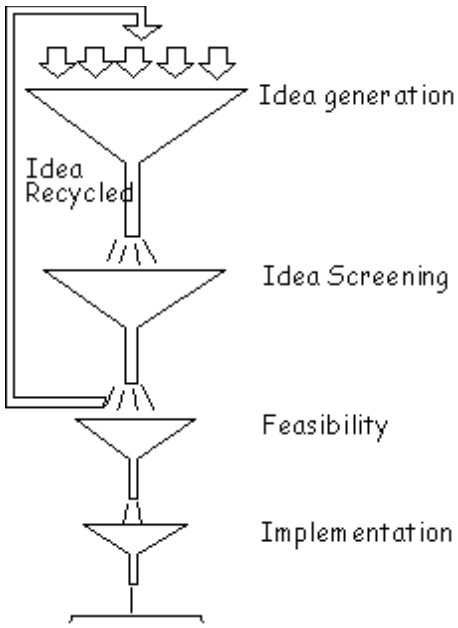
Innovation works on the basic principle that ideas are fragile and organic and that every idea has value and deserves a mandatory hearing. The originator of the idea needs assistance in idea enhancement and in promoting or selling the idea internally. Creativity propels innovation, the creation of the concepts leads to the transformation of the idea to reality- a product or a service. The originator is the creator, the initial advocate of the idea, his active involvement would be the most critical to the business developed. It is a standard dictum and only ideas sufficiently enhanced to demonstrate potential value can be brought forth to the management. The technical and marketing issues need to ironed out in the development of an idea, the differences among people constituting its strength rather than the weakness of its idea. The heat an idea generates fuels the innovation engine. Cross cultural differences has be mitigated by presence of a meaningful and purposeful mediator fully committed to the realization of the idea.

No risk, no gain has been the management mantra for ages. The thought that differentiates leaders from followers. The persons who went on the untrodden

path went on to icons of the modern world, Steve Jobs and Bill Gates to name just a few. The risk taking ability in not one single trait. It has its genesis from ones knowledge, experience, expertise, grasp of the organizational, economic and social picture in totality and then the passion to experiment and be successful. Inclusion means business, as it take the products to larger number of concurrent circle of customers. It's the ability to satisfy needs of present and distant customers with satisfying their customer hunger. The scores gets really settled and innovator becomes the final winner if he is successful in seeing the complete adoption of the product or service in the lives of the end user.

Process

The innovation can be represented by a series of funnels each getting progressively smaller. It is found over the years through objective studies that typically out of sixty ideas getting into the top funnel, only one innovation is produced. The funnels are labeled as the four phases on the process- idea generation, idea screening, feasibility and implementation.



Effectiveness

The pace at which the innovative ideas lead to the final adoption is dependent on the manner in which this process is implemented. Few ideas should be implemented at regular intervals. Regular feedback must to ensured and there must be communication channels to the originators. The screening system put in place for filtering of ideas should be simple and understood by everyone. The ideas ought to be transformed into reality at a reasonable speed- if the system is too slow, we may be too slow to react to the market place and turn off idea originators.

Knowledge Layers

The knowledge layers of innovation can be broadly be divided into:

- Adaptive Layer
- Experiential Layer and
- Existential Layer

The names given to different layers are self explanatory.

Design

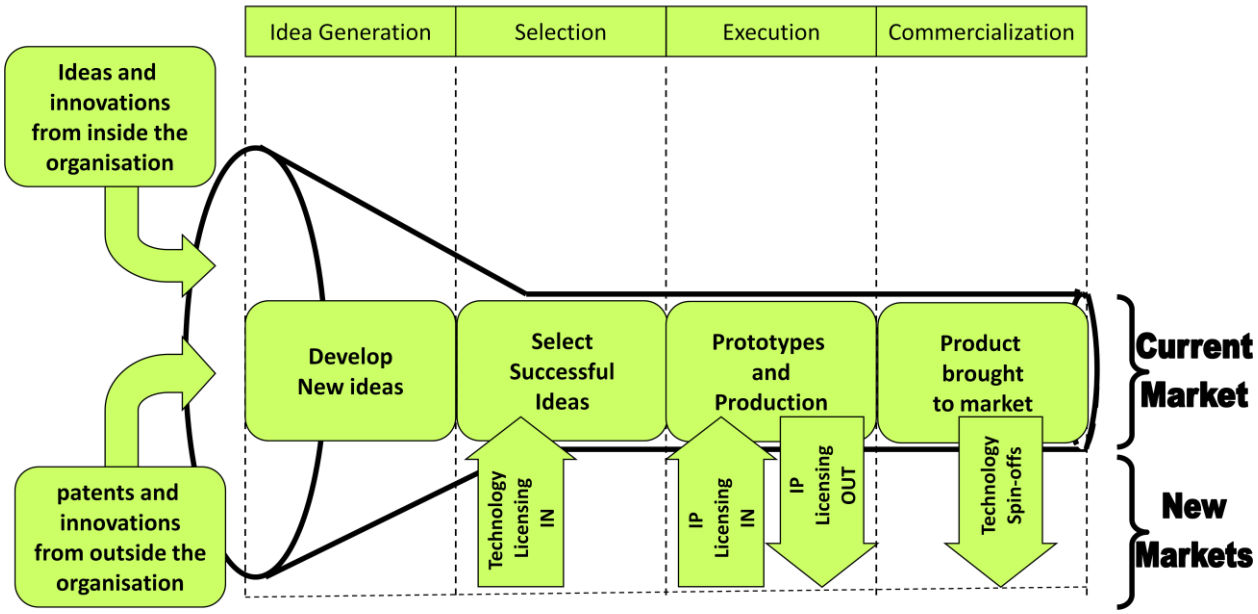
The design is the ability to move from the existing to the preferred. Design in the making, means the journey from the present to the desired future. Design is a way of taking the journey to the desired future. The object of design can be a thing, service, experience, organizational structure, doctrine, or set of operational guidelines. Design embeds disruptive innovation as an organizational process.

Innovation Life Cycle

Every process has a life cycle,in its understanding lies your capability to manage the process in an aligned manner, taking it to its logical conclusion. The innovation life cycle can be divided into a) Idea Generation, b) Selection, c) Execution and d) Commercialization. The first phase of idea generation is the development of new ideas itself. It happens through two simultaneous processes namely ideas and innovations from inside the organization and patents and innovations from outside the organization. This is the funnel entry point. During the second phase, selection, successful ideas are selected, with technology licensing being a critical input. The third stage, prototypes and production which has two inward and outward components of IP Lincensing IN and IP Licensing OUT. The final stage is commercialization, when the product is brought to the market with the interface

with the current market and because of technology spin-offs it has the capability to create new markets.

INNOVATION LIFE CYCLE



Diffusion of Innovation

The innovation gains permanent roots in a social system through the process of diffusion. Diffusion thus is the process of communicating innovation overtime among members of a social system. This theory explains how, why and at what rate new ideas and technology spread through cultures. This process can be broadly divided into five stages viz Knowledge, Persuasion, Decision, Implementation and Confirmation. The five stages are discussed as follows:

Stage 1 Knowledge: In this initial stage, the individual is exposed to an innovation but does not possess the relevant information regarding the innovation. At this stage of the process the individual is not fully inspired to find out more information about the innovation.

Stage 2 Persuasion: In this stage the individual is interested in the innovation and actively seeks information/details about the innovation. This stage indicates a clear cut interest in the innovation.

Stage 3 Decision : This is the most critical stage. During this stage the individual takes the concept of the change and weighs the advantages/disadvantages of using the innovation and decides to adopt or reject. Due to the individualistic nature of this stage, Rogers notes that it is the most difficult stage to acquire empirical evidence.

Stage 4 Implementation : In this stage the individual employs the innovation to varying degrees depending on the situation. During this stage the individual determines the usefulness of the innovation and may search for further information about it.

Stage 5 Confirmation : Although the name of this stage may be misleading, in this stage the individual finalises his/her decision to continue using the innovation and may end using it to its fullest potential.

Ecology of Innovation

The ecology of innovation is the contextual framework of innovation, its the precursor to innovation itself. Though a lot of literature is available on this issue yet it has not been very succinctly explained to the general reader earlier. It is done in his latest book by Subroto Bagchi MBA@16 and character in that quote is me, in the Chapter Facebook Face-off. Verbatim for you:

"Why do trees grow strong and tall in the rainforests? Is it because of the ecosystem. When a seed falls, the ground is fertile. Then there is a mutually dependent, complex system that encourages competition and growth and, in the process, the rainforest becomes the world's most beautiful collection of flora and fauna. Now, think of the seed I just spoke about as an idea and ask yourself, in which organization, which region and which country would an idea have the best chance? It depends on the ecosystem that the organization or the country has and it is very difficult to simply copy it. That is why Toyota is in Japan and HP and Facebook are in California and Infosys and Mindtree are in Bangalore. What is the rainforest –like ecosystem here? It is the mutually dependent elements like good educational institutions , good living, and at times good weather, presence of an intelligent press, art, literature, culture and demographic diversity. Monochromatic societies, which are uni-language, uni-religion and insist on isolation, seldom innovate. So building diversity like rainforest is very essential."

Over to the case studies

As decided by ELL, the lecture would be a two part one, the first part would be an introduction to ELL and the type of learning it entails and the management principles of the topic being dealt in that particular ELL, as the topic for this ELL is Innovation. Second part of the lecture would be deal with three case studies, one completed innovation project, the other one evolving and third one still at the conceptual/planning level.

With ecosystem providing the dynamic framework to the management principles pertaining to innovation, we change gears and move on to the true face of innovation, in the wide wide world, its execution, the issues and the final success.

Case Studies

Successful Case Study- Police IT

Why an ERP?

The functioning at the physical level was creating bottlenecks, which was contrary to the basic functioning of the department, the pace of response, the precision and high quality documentation. There was need to debate whether to go digital, the choice was clear, the route to be taken was the only issue. The Software Requirement Specification sorted out the issue and the project was on the track. The actual development began.

What is an ERP?

ERP is a comprehensive software solution taking into consideration all tasks and requirements of the organization with inter and intra linkages within and outside the modules and finally working and one single software entity at the front end. Comprehensive ERP system provides for seamless integration of the day to day operations of the Policed department. An integrated system that operates in real time without relying on periodic updates.

ERP Characterstics

An ERP has a common database which supports all applications. A consistent look and feel throughout every single field and screen and throughout every single module is the trademark on an ERP. This installation of the software system is done without much elaborate application /data integration by the IT departments of the concerned organization.

On Offer

In its conceptualization, creation and roll out, it would have a pioneering impact in the way Police in India would go digital in the days to come.

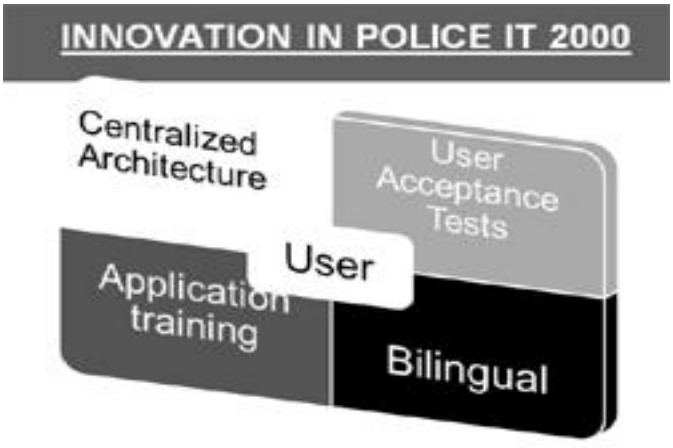
Police IT Modules

Police has 12 modules in all. The core Police modules are Crime, Law and Order and Traffic, the administration related modules are Finance, Administration and Stores and modules pertaining to the ancillary services are Armed Reserve, Motor Transport and Training and the technical modules are Wireless and the Forensic Science Laboratory. Over these 11 modules is overlaid the Management Information System, which provided the critical inputs to the Police Manager for all decision making.

Innovation in Police IT 2000

The realization of the full potential of a revolutionary technological project becomes clearer as the projects gains momentum and complete contours of the project becomes clear. The Police IT 2000 as the software was originally known, at the later stage led to the realization of the software's real potential and finally it was appropriately renamed as Police IT ERP in tune with the characteristics of the software. I presume this was the biggest innovation which changed the very nature of the software in all it dimensions, look, feel, architecture, usage, utilities, external interfaces and finally the day to day output and above respectability so critical in our official and social ecosystem.

The end user was at the center of our universe, it was like SINGH IS KING. The decentralized architecture gave way to the centralized. The real time dynamic testing was put into the act and User Acceptance Tests (UAT) was introduced. The software was made bilingual to the ease of more than 95% of the users. The commonplace user got his first important utility, the language, the software would undoubtedly follow.



Application Training

Training has always got a very step motherly treatment in the government. This leads to the project vanishing into thin air even after successful execution and commissioning. To ward off such an impending danger, few preventive steps were put in place well in advance. The model of training switched over form unstructured to dynamically structured model. Besides the very few established training centers, temporary need based training centers were created to clear a heavy backlog of basic training or refresher training whichever was required. The assigning of additional training responsibility to the Software Development Team changed the rules of the game and things started falling in line. The TOT, Training of Trainers Program had the inherent capability to have a multiplier impact which it did had ending in the training of over 12000 end users in Application training with a span of just 30 days. The manpower resources were located at geographically convenient locations based on the user needs.

The linear progression of the training for end users was from the simple to the complex and so was the roll out of the application. One major push in the training was given for the Crime Module, by far the most important module, the acceptance of which meant the acceptance of the complete software, which did finally happen. The training medium become the local language, Kannada, it sorted out all language issues once and for all. The application software fully supported the training as it was made bilingual. The trainer-trainee relationship was attempted to made more permanent and pervasive helping in easier assimilation of knowledge and its final usage. The respect provided to the human resources with knowledge irrespective of rank, gained more respect to the superiors, to the application software and also to the great thought process of moving to a knowledge based world.

Creation and Maintenance of Broadband Networking

As Gods in Indian mythology, so in modern day software world, the Software needs a 'Sawari' or a vehicle. For the software it's the broadband networking, a 24/7 fail safe medium, functioning effortlessly and seamlessly. The creation of a core team helped establish this network and then maintained without the assistance of any outside agency. This core team was created through the process of Systems Admininstrators Preparatory Training, the putting them through MCSE and CCNA, which every single one of them cleared. This has been the efficacy of that training. The concept was to empower the lowest staff to do the highest end jobs. They first accepted the responsibility, thorough lot of proactive measures their interest in the project was maintained and finally the desired capability was

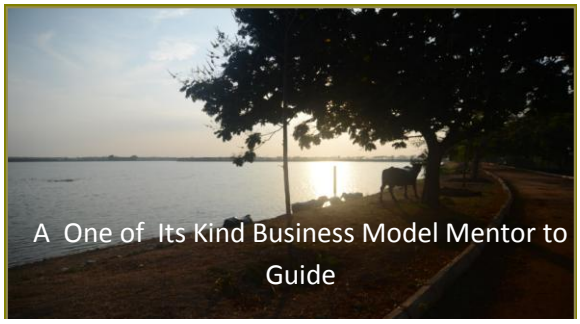
created. Sustaining after going through the whole process does not create any issues as this was a small group highly trained and motivated professionals.

Today Karnataka State Police Wide Area Network is the only Broadband Network in the country, fully functional in the internal security sector, connecting 1439 locations on MPSL, VPNoBB and Internet leased line and running a fully functional ERP for the last two years. Might be we can call it the eighth wonder, it has been maintained by departmental human resources with a demonstrated capability for more than two years and would keep doing it for all times to come.

2.Evolving Innovation- Operation Kundawada Kere

Narration through text or at best diagrams is the general mode of communicating our story, dissemination of information or imparting education. For once we change into a totally different mode, where pictures would narrate the story of innovation with a simple caption on each one of them. As the saying goes a picture is more than a thousand words, the story told through these pictures and learnings which leaves behind would be more than thousand of words and would leave a permanent imprint on the readers mind.


Knowledge Base is at the base
of Innovation


A One of Its Kind Business Model Mentor to
Guide


Mixed Pressure Group
Involvement of all


It is all in the field


Sanctity of Expert Advice


Innovation needs required
momentum

The long road ahead

3. Proposed Innovation: University Examination System Major Overhaul

The seriousness of this idea came to the fore in the wake of Kuvempu University Answer Script Scandal, busted on the night of 14/15th May 2012, wherein 6 accused persons were arrested. All the accused were assistants working in the examination related offices. Changing original answer sheets was one of the nefarious acts done by them. It was done at the time of encoding the answer scripts or by taking away all the answer sheets to their house and changing inside portion, keeping outer page intact before encoding. The other modus was striking off the serial number of the original answer sheet and sticking a fake one and then mixing it in the original bundle.

Fake degree and marks card were being sold by this gang for Rs 2 lakhs. They also indulged in changing marks in Base Registers, prompting authorities to issue modified marks. Fake degrees were sold by pilfering original blank marks card/degrees as well. Holograms were also pilfered. Most interesting fact which came to light was that services were provided at the time of the verification of document by the employer. They hijacked the letters which were sent by the employers to the University and sent fake replies on behalf of the University/Colleges.

Though the concept may not look innovative at the face of it, yet in reality if implemented would impact the University Evaluation System in a completely innovative manner, by way of new system and a process and bring in digital technology while doing away with human intervention thus doing away with all the ills of the present, which has been elaborated in the foregoing paragraphs. Integrated University Examination Management System (IUMES) will comprise of the following modules:

- **Creation, collation, storage, transfer and printing of question paper at the examination hall.**
- **Evaluation and tabulation**

- **Creation of Base Registers, printing of marks card, dispatch etc**
- **Creation of University Records Section, full digital as a separate entity**

This solution has the capability to positively bring academic sanity to the examination and evaluation system.

Customer /End User is at the center of the Universe

At the center of all innovative thought process is the end user. His needs at the existential level makes the leaders with innovative streak crazy about innovation. Its improves his living immensely, see what electric bulb did to the whole world. The quality of governance depends on the quality of services to the citizens and given the gigantic nature of the job, more so in resource scarce economies like India, innovation is bound to provide large number of answers. In the case study on the evolving innovation, the walkers/picnic goers for Kundawada Kere are the end users and if we take it further it can be photographers, bird watchers and researchers as well. The ends users grow is concentric circles and so does their demands and only an extremely innovative mind can find solutions to such vexed issues within the limitations of resources, technology and expertise.

Conclusion

Creativity and passion are the heart of innovation.