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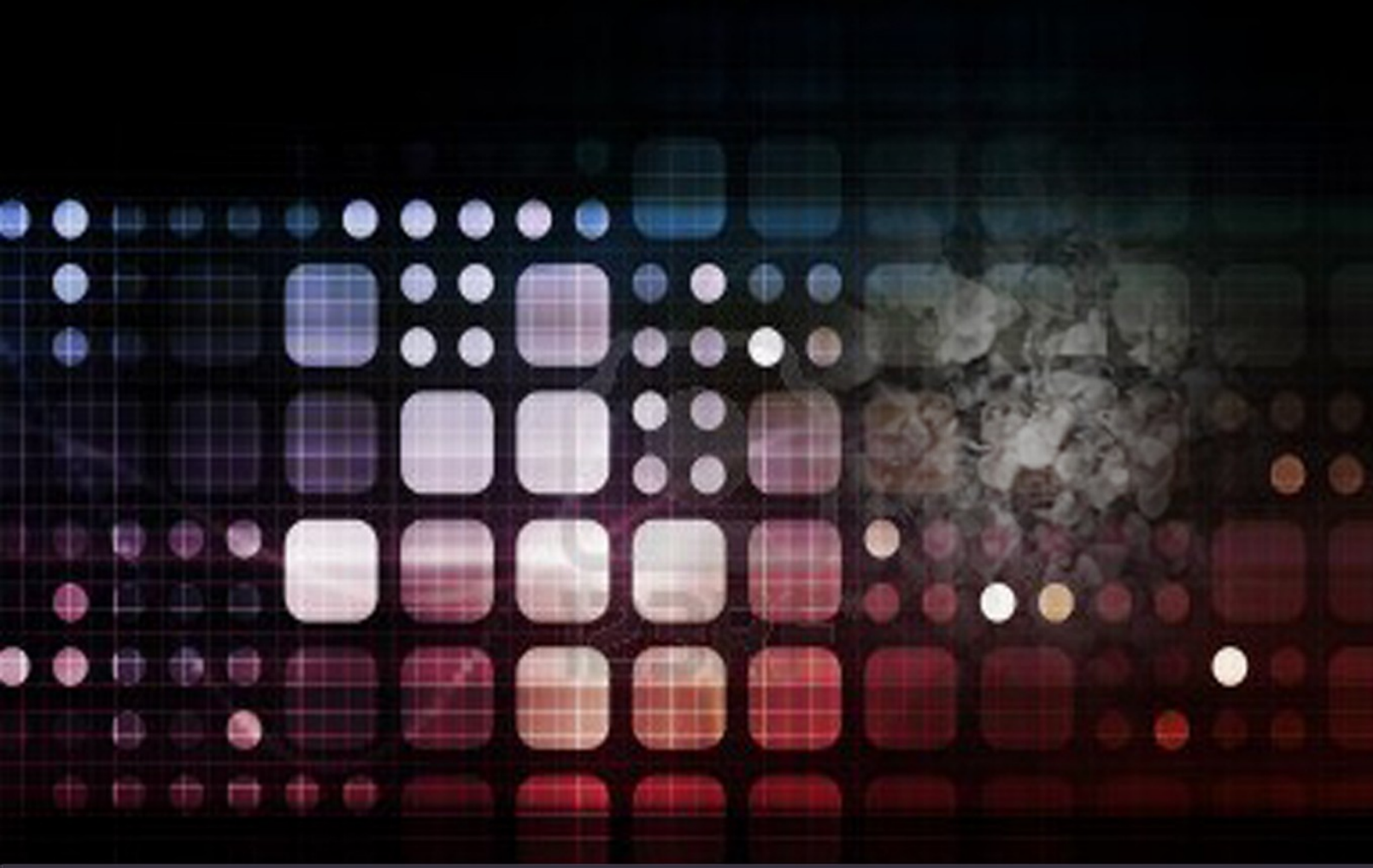
udbhava

Demistifying Lean !!!



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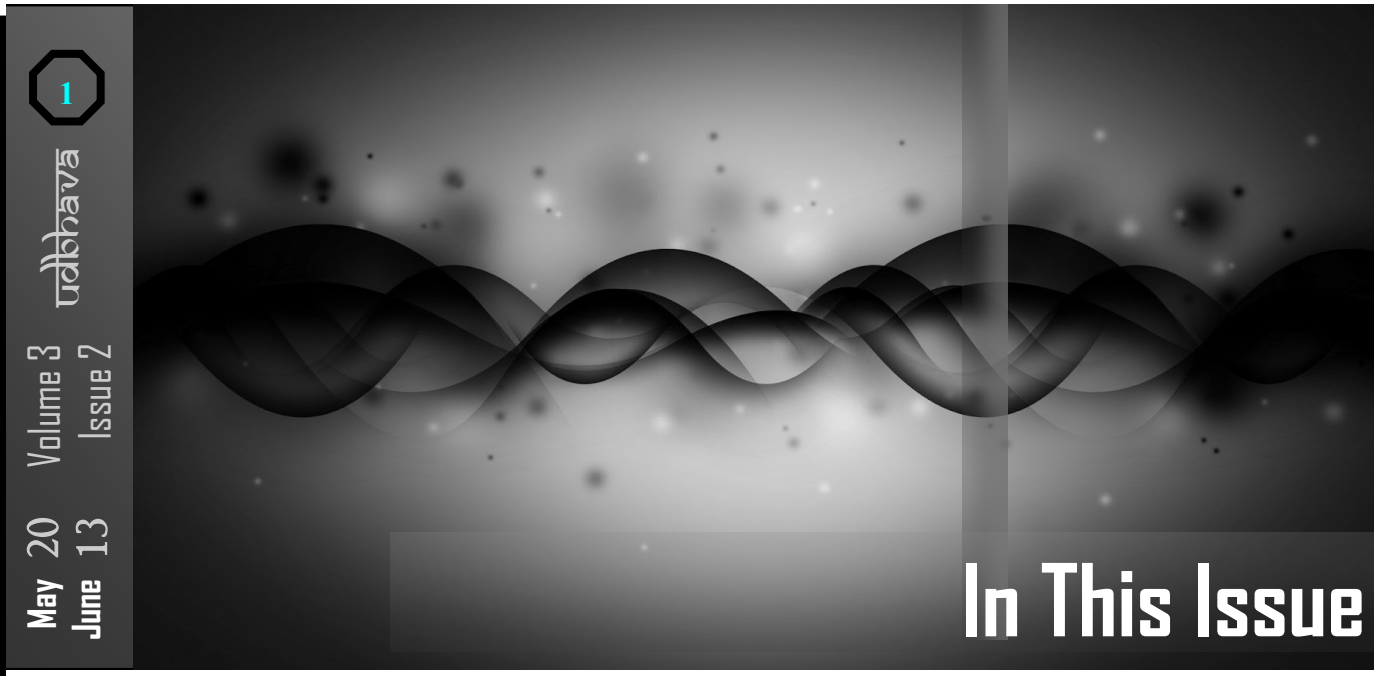


In This Issue

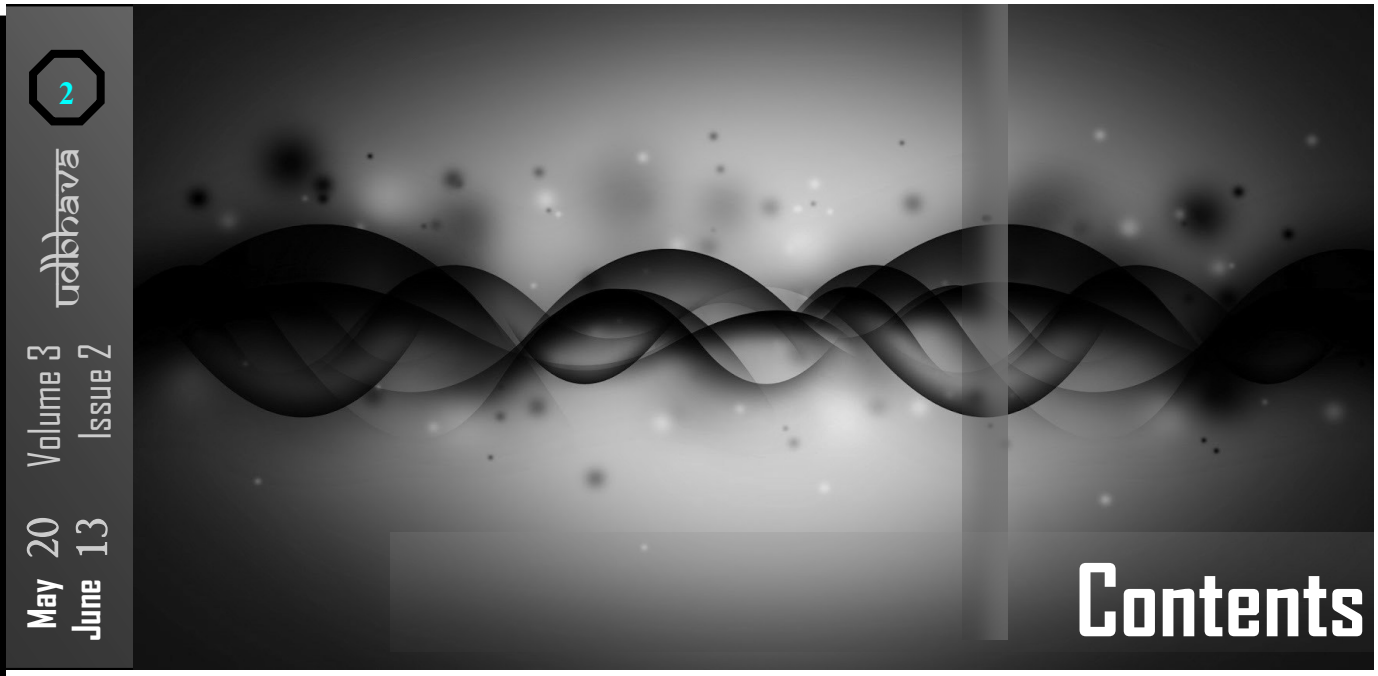
Dear Readers,

This issue of Udbhava focuses on some of the general issues related to lean operation and systems as it's theme and tries to cover important aspects of the same while also focusing on the management aspects.

The operations management as is an area concerned with overseeing, designing, and controlling the process of production and redesigning business operation, this issue of Udbhava enlights the necessary concepts used by industries. Also we introduce 'Industrial News Feed' which shows the recent news on industrial management activities.

Hope we have done justice to your expectations and that you have a delightful read.

Happy Reading!



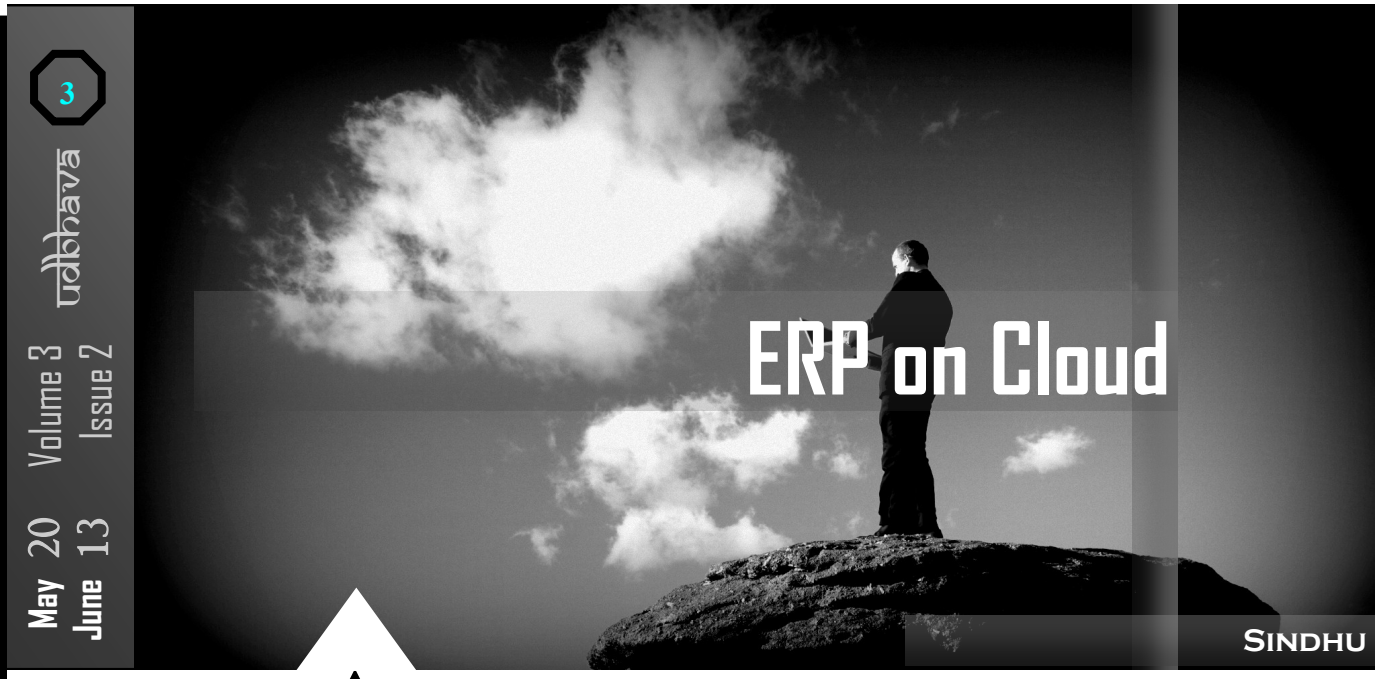
Contents

Industrial News Feed

Manufacturing industry showing signs of a slowdown

Next Aakash tablet at Rs 2500 apiece

MediaTek unveils new smartphone platform

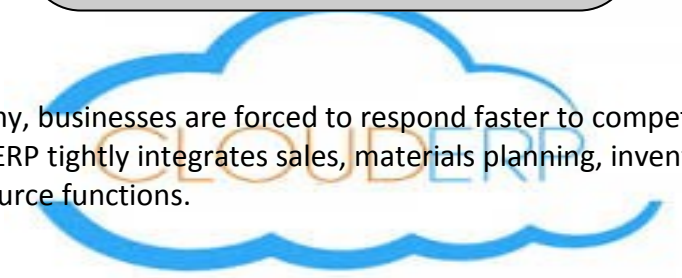


ERP on Cloud

SINDHU

Cloud ERP is an approach to enterprise resource planning (ERP) that makes use of cloud computing platforms and services to provide a business with more flexible business process transformation. OnDemand ERP is Business Management Software that is hosted off-site. This allows you to implement a powerful ERP system without the huge price tag. A low monthly subscription is paid instead of a large upfront cost.

Why go for on-demand erp?



In today's global economy, businesses are forced to respond faster to competitive and customer challenges. OnDemand ERP tightly integrates sales, materials planning, inventory, manufacturing, finance and human resource functions.

BusinessIntelligence

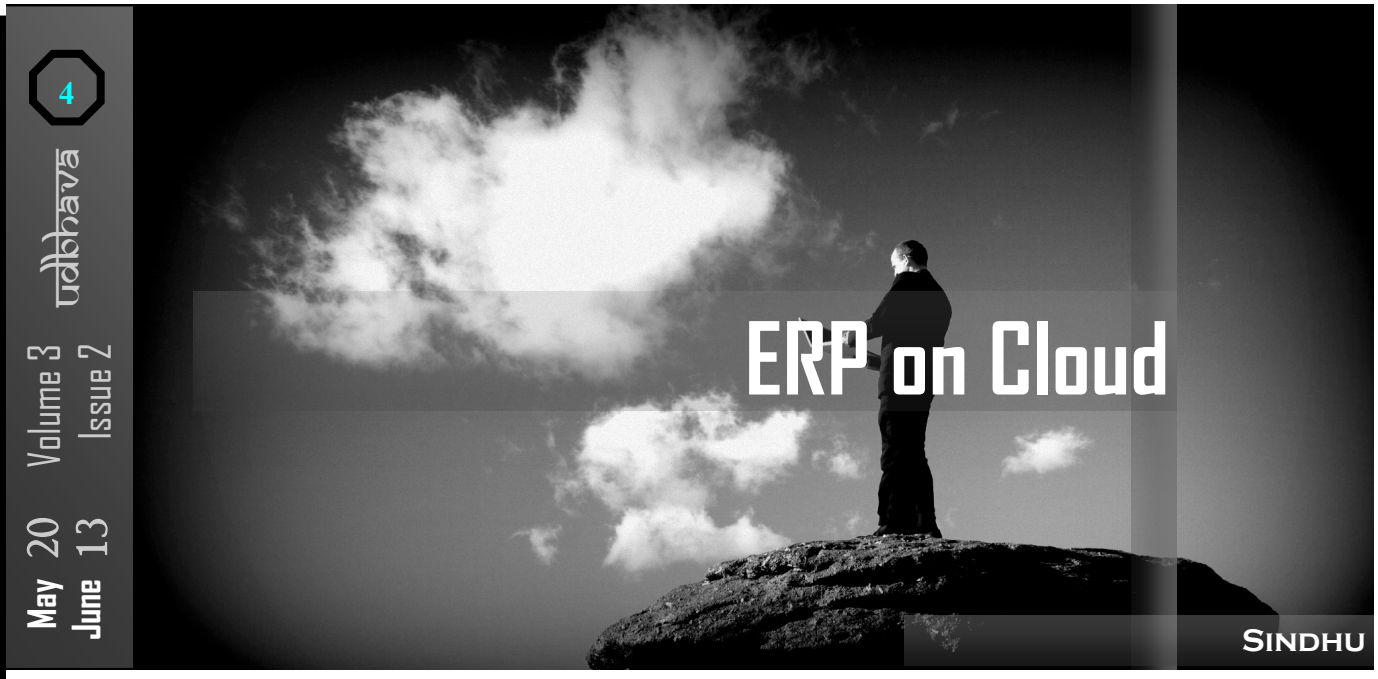
On-Demand ERP allows you to dig deep into your data and find the secrets to your company's successes and failures. Unlocking this data gives you the power to improve your business. Get the answers to important financial and work flow questions immediately.

EnterpriseTechnology

On-Demand ERP was developed with quality and scalability in mind. The enterprise application was developed with a 3-tier architecture. Whether it is from a client computer, PDA, web browser or a cell phone, each request is received and processed by the application server layer. This provides the customer with a very flexible, yet robust software system.

Software as a service(SaaS)

With no software to install or expensive servers to purchase, you don't have to wait weeks or months to get going



Benefits

Lower Total Cost of Ownership (TCO)
There is little question that SaaS solutions generally provide lower computing costs initially and over a five year useful life.

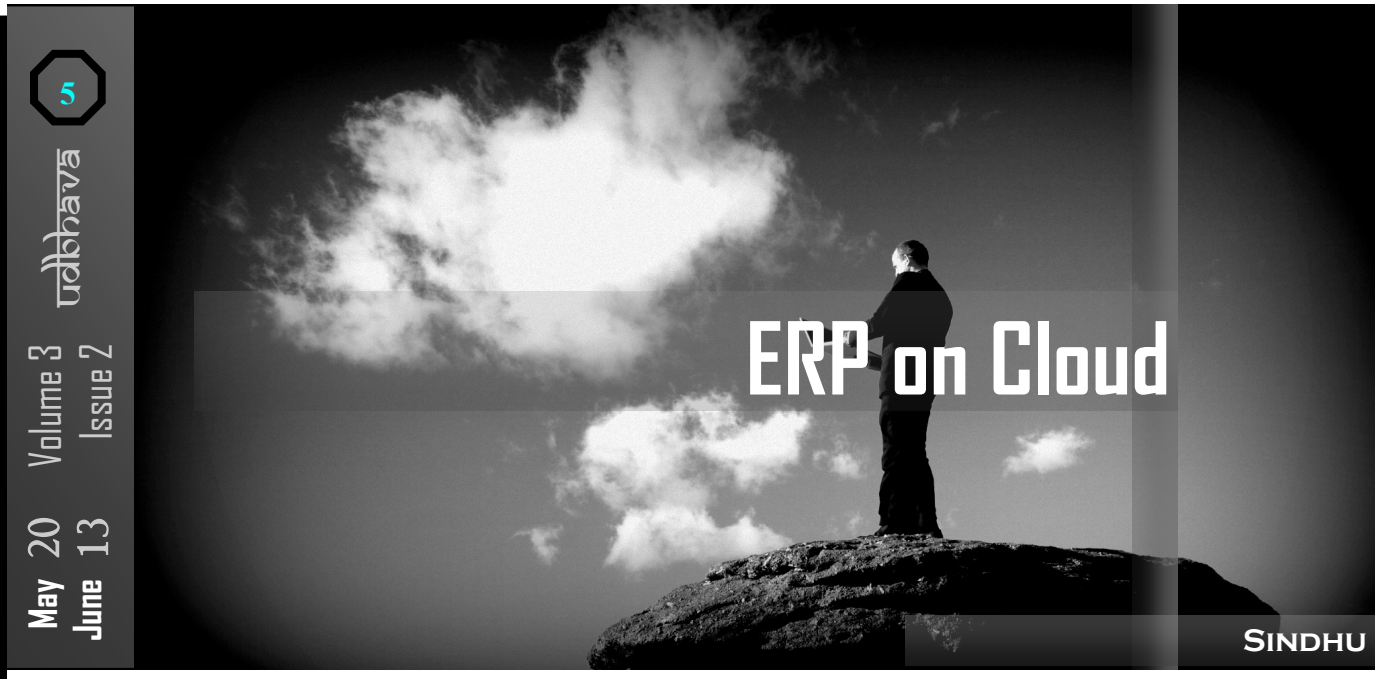
Decreased implementation risk
Eliminating the computer hardware and platform software components (such as relational databases, operating systems, security appliances, maintenance management tools, etc.) and decreasing the overall implementation time lowers the probability for project delays and implementation failure risk.

Accelerated software implementations
Without the incurred time and technical issues associated with the installation and configuration of data center appliances, hardware servers, platform software and related computing hardware, ERP system implementations generally achieve a jump-start and a decreased implementation period.

Outsourced skills and expertise
Outsourcing the IT (Information Technology) management of ERP systems and related business applications to experts allows internal IT resources to focus their time on core competencies, higher priority projects and strategic services.

Hosted software delivery
The more reputable SaaS business systems guarantee anytime, anywhere access and back up that guarantee with a Service Level Agreement (SLA) backed by financial penalties for system down time. ERP browser-based system access is especially valuable to highly decentralized companies who have staff accessing the business system from multiple office locations, home office locations or while traveling.

Subscription pricing model
The market has enthusiastically embraced the pay-as-you-go software utilization pricing model over the pay-and-pray procurement method, eliminating the all too common cost overruns associated with on-premise ERP systems implementations.



ERP on Cloud

SINDHU

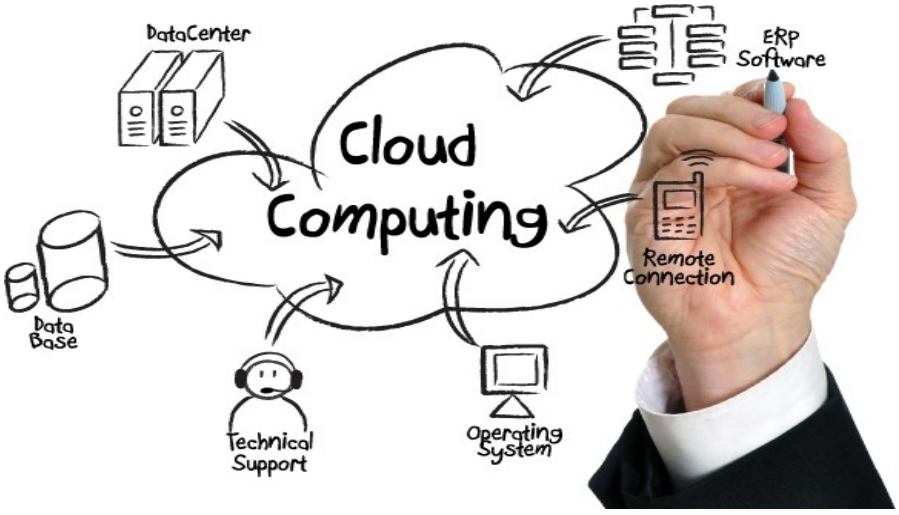
Growth Opportunity

Post-recession period, small enterprises are fast realizing the benefits of deploying ERP (enterprise resource planning) applications on a software-as-a-service (SaaS) model, which promises to offer benefits of traditional ERP at a fraction of the cost.

Delivering ERP on a SaaS model is a revolutionary approach in enterprise software and offers enterprises a viable, scalable and flexible model that will take them to the next level in terms of benefiting from technology.

Conclusion

On demand ERP certainly has an edge over the erp on premise.ERP and cloud computing go hand in hand as its provides ERP software developed specifically for cloud computing Environments will include new feature sets that were simply not possible using old technology. Until then, cloud ERP is seen as being good for startup organizations and new business divisions within an existing company.



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Value Stream Mapping

RAJIV PILLAI

Value stream mapping is a lean manufacturing technique used to analyze and design the flow of materials and information required to bring a product or service to a consumer. At Toyota, where the technique originated, it is known as "material and information flow mapping". It can be applied to nearly any value chain.

Special type of flow chart that uses symbols known as "the language of Lean" to depict and improve the flow of inventory and information.

Value Stream Mapping is a method of creating a “One page picture” of all the processes that occur in the company, from the time a customer places an order for a product, until the customer has received the product into their facility.

The goal is to depict material and information flows across and throughout all Value Adding Processes required to produce and ship the product to the customer. Value Stream Maps document all of the processes used to produce and ship a product, both value adding and non-value adding processes.

Why value stream map ?

During the team creation of Value Stream Mapping, business and manufacturing waste that occur in the process can be easily identified.

Once the current state Value Stream Mapping is created, it becomes the baseline for the improvement and for the creation of future state Value Stream Mapping. The FSVSM can then be used as a world class manufacturing implementation road map.

Industry News Feed

Manufacturing industry showing signs of a slowdown

The manufacturing industry grew for the fifth consecutive month in April, indicating overall economic growth in the U.S., but the pace has slowed.

According to the Institute of Supply Management, the Purchasing Managers Index, which consists of five economic indicators, came in at 50.7. That's down 0.6 in April from the previous month, but still considered an expanding market. An index under 50 means the industry is contracting.

Manufacturing in Chicago took a hit in April. The Chicago index of economic activity in the industry fell 3.4 to 49.0, a three-and-a-half-year low. As per the report, 14 of 18 manufacturing industries reported growth in April. The contracting industries are wood, food beverage and tobacco, and chemical products.

Red Tagging

A USEFUL SORTING TOOL

PRATYUSHA

During the sorting step of 5S, unnecessary items are removed from a work area. Red tagging is used for identifying the items that need to be either relocated, thrown out, sold or recycled. They are very simple but powerful tool to remove clutter, which can truly make the work to be far more productive. These tags easily communicate visually to staff members that the tagged items are unwanted

The red tag process follows the basic flow:

- Staffs identify a tool or an item that is in question.
- Staffs then fill out a red tag and stick it to the item, then wait for the input on the action of red tagging the item.
- If other staffs question the red tag, the decision makers for that particular area decide on whether to keep the item or not.
- The red tag is removed from the item, if it is to be kept. If it is to be removed, it is disposed of to a red tag area (Basically a holding area for items with value but no places).
- An unneeded item in one area can still be put into use in another area.
- In some organizations an approval is required to remove a red tagged item.

Red Tagging

A USEFUL SORTING TOOL

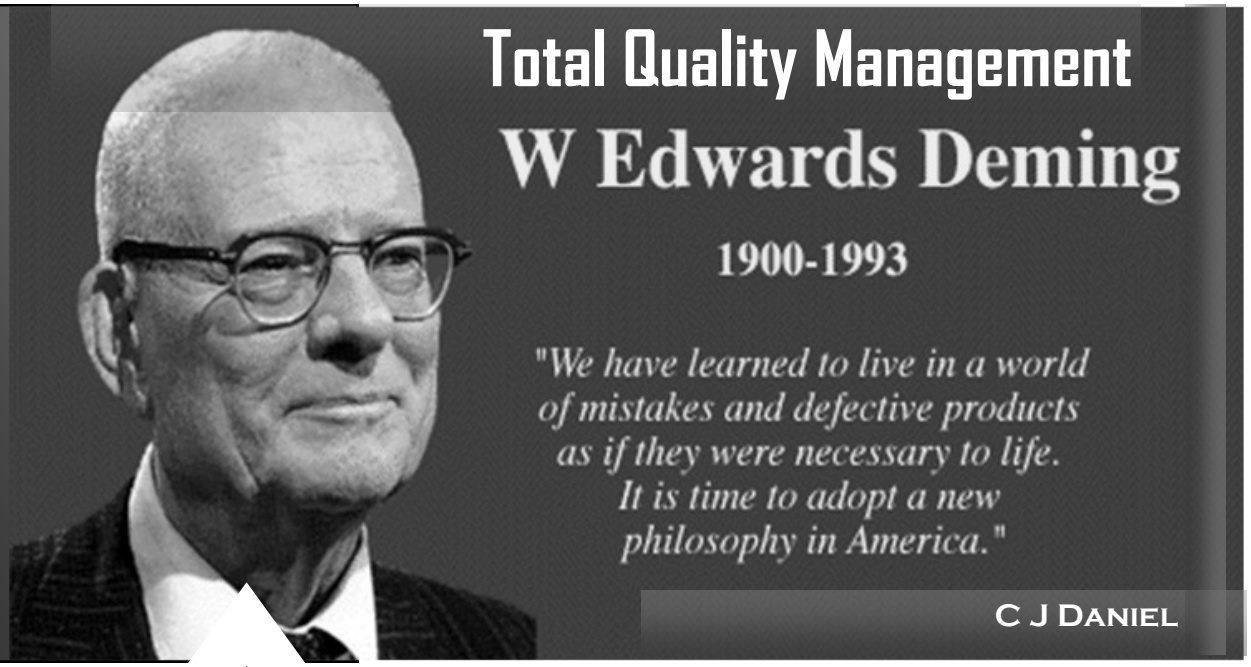
PRATYUSHA

Items that are in the red tag area, if not claimed by a designated date, should be removed to keep the area from turning into a dump warehouse. The disposal ranges from the equipment selling, to auctioning it or giving it to staffs, to scrapping it.

The red tag system is a safety process that prevents eager improvement teams from taking necessary equipment from an area. If an item's red tag is removed, the item should have a location designated and should be labelled as per its use. This will keep future teams from red tagging the equipment over and over. The red tagging is very simple but powerful tool to remove clutter, which can truly make the work far more productive.

http://www.leanhealthcareexchange.com

http://www.leankaizen.co.uk



The continuous process of reducing or eliminating errors in manufacturing, streamlining supply chain management, improving the customer experience and ensuring that employees are up-to-speed with their training. Total quality management aims to hold all parties involved in the production process as accountable for the overall quality of the final product or service. Total quality management (TQM) was developed by William Deming, a management consultant whose work had great impact on Japanese manufacturing. While TQM shares much in common with with the Six Sigma improvement process, it is not the same as Six Sigma. While it focuses on ensuring that internal guidelines and process standards reduce errors, Six Sigma looks to reduce defects.

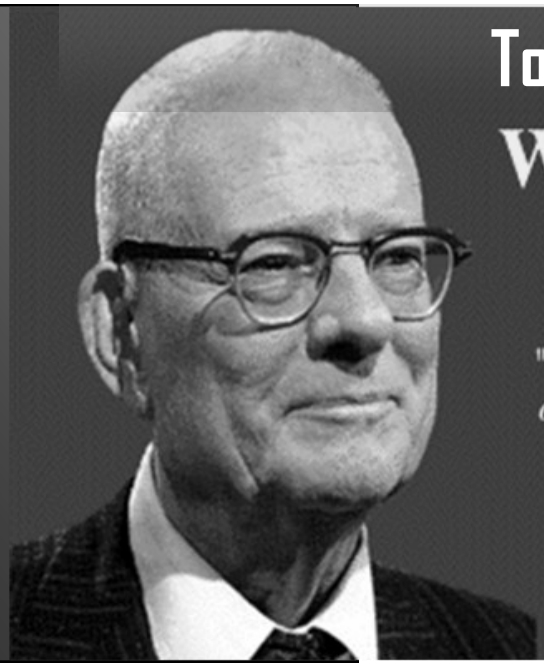
Three Different Approaches in Total Quality Management

It's wise to evaluate approaches of Total Quality Management (TQM) that best suit your type of business, your personal management style, and your customers. Here we're looking at three of the top favorite management processes: Empowering your team, Pareto charts, and ISO quality procedures.

When you consider your approaches of Total Quality Management (TQM), you have to evaluate which methods best suit your company and your management style. The term came from the teachings of the late statistician and industrial consultant, W. Edwards Deming, who promoted five basic principles:

Reduce errors that occur during the manufacture or presentation of a product or service.
Render efficiency among the components (staff or company departments) necessary to produce the product or service.
Utilize the most modern equipment or procedures available.
Maintain constant levels of employee training and education.
Assess levels of customer satisfaction.

Some of Deming's most renowned work centered on adhering to qualify specifications, but Deming believed in more than slide rule measurements and calibration techniques. His formula for success focused on quality as the outcome of work efforts divided by the total costs. This theory held that by concentrating on manufacturing a quality product, costs would naturally decline over time. Conversely, Deming believed that when companies focused all their efforts on reducing costs, then quality was jettisoned. There are multiple approaches of Total Quality Management, and many managers like these three best:



Total Quality Management

W Edwards Deming

1900-1993

"We have learned to live in a world of mistakes and defective products as if they were necessary to life. It is time to adopt a new philosophy in America."

C J Daniel

Create the Ultimate TQM Environment

Employees and departments should not feel as if they are in competition with one another. If you are managing TQM, then your primary goal is to ensure that you instill a sense of pride in your workers that will build cross-functional teams of employees. Lessen your focus on merit increases and statistical achievements, and increase attention toward the individual's contribution. Reward self-improvement and cooperative efforts among employees. When product tests show repeatedly demonstrable improvements, celebrate the success with your staff. Your approach with clients should be to offer a *quality* product, not the cheapest-possible product or most-quickly-produced product. A company that follows this formula might experience higher costs in the beginning, but as workers become accustomed to details of the job, the processes will become streamlined—and thus less costly—as a natural byproduct.

Utilizing Pareto Charts

While Deming eschewed too much attention to statistics, it's true that charting can clarify causes versus their effects. The Pareto chart illustrates the principle put forth by Italian economist Vilfredo Pareto that approximately 80 percent of your defects come from 20 percent of your problems. Create a Pareto chart to display what you believe are current negative factors in a given area; note where the line you have plotted along your x-axis meets the 80% mark on your y-axis. Whatever you capture to the left of that line is important. Whatever is on the right might be bothersome to you personally, but its overall effect on your product or service quality is negligible.

ISO: Setting Standards for Consistency

The ISO has been around since 1947, and many companies are certified in one or another level of ISO standards. It trains groups of employees to function consistently in performance of job duties in order to ensure predictable outcomes. Whether or not your company achieves ISO certification, the wise supervisor appreciates the importance behind a standardization process.

Why is it so important to practice consistency? Consider the last time you took a cardiopulmonary resuscitation class. You learned that if you come upon an unconscious victim, there is a series of steps through which you must proceed if you want to pass the course (and, of course, revive the victim). You cannot bypass the seemingly simple steps; you've got to check that the environment is safe, you must shake and shout to the victim, and next call 911. Only then can you perform the seemingly more important steps such as checking for breathing,

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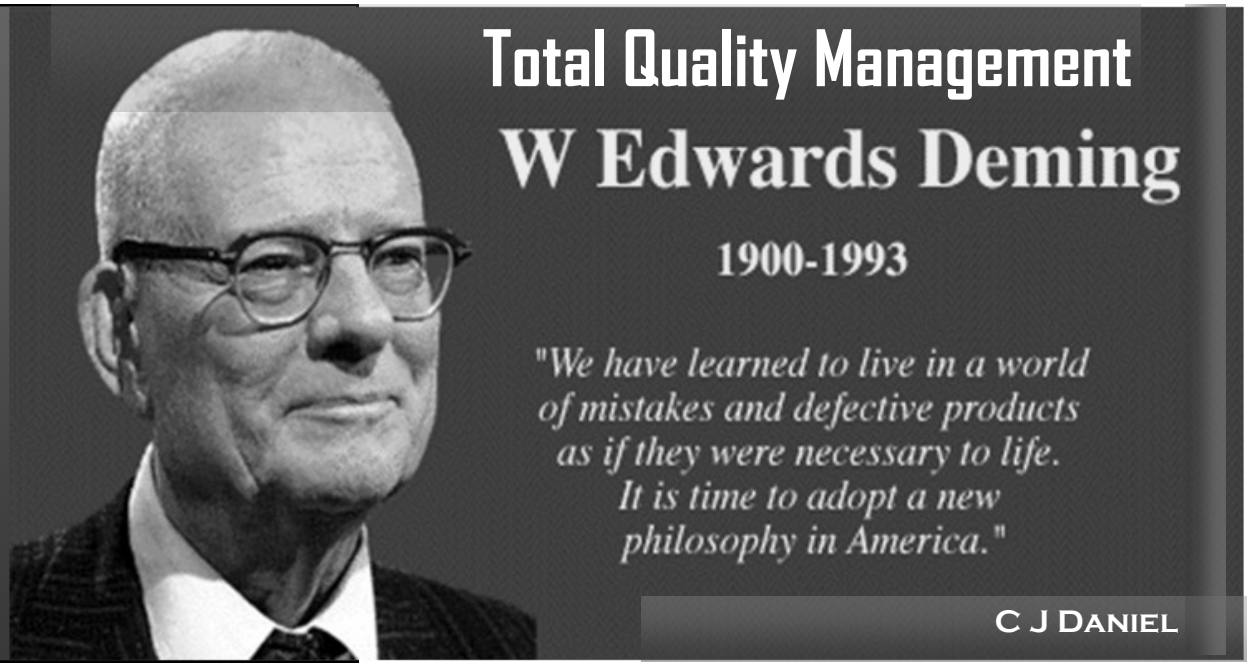

tilting back the head, and giving your initial rescue breaths. But by learning each step in order by rote, you are learning a mnemonic; if need to put your skills to use in a true emergency, you will automatically perform all the correct steps.

The same applies to standardization of procedures within a company. It's wise to review policies and procedures across all departments and determine where cross-training will render your employees able to act uniformly and efficiently, whether it applies to product development, customer satisfaction, or any other area of procedure. Uniformity of process can result in vivid, satisfying

A Coprorate Culture Based on Quality

Remember: You can combine various approaches of Total Quality Management to best suit your company, your product or service, and your management style. As you steer your corporate culture toward appreciation of each contributing employee as well as the customer, your quality will climb and your costs will drop.

Next Aakash tablet at Rs 2500 apiece

After completing supply of 1 lakh units of Aakash tablets to IIT Bombay for Rs 2,263 apiece, Datawind is ready to provide the next version of the device at a tentative price of Rs 2,500 apiece.

Lean Manufacturing

Aswathy Ravindran

Lean manufacturing is a management philosophy derived mostly from the Toyota Production System (TPS) and identified as "Lean" only in the 1990s. TPS is renowned for its focus on reduction of the original Toyota *seven wastes* to improve overall customer value, but there are varying perspectives on how this is best achieved. Within the organization Toyota, four prominent gentlemen are credited with developing the system: Sakichi Toyoda, who founded the Toyoda Group in 1902; Kiichiro Toyoda, son of Sakichi Toyoda, who headed the automobile manufacturing operation between 1936 and 1950; Eiji Toyoda, Managing Director between 1950 and 1981 and Chairman between 1981 and 1994; and Taiichi Ohno, the Father of the Kanban System.

A lean organization understands customer value and focuses its key processes to continuously increase it. The ultimate goal is to provide perfect value to the customer through a perfect value creation process that has zero waste. A popular misconception is that lean is suited only for manufacturing. Not true. Lean applies in every business and every process. It is not a tactic or a cost reduction program, but a way of thinking and acting for an entire organization.

Lean Manufacturing

Aswathy Ravindran

So how is Lean implemented in an manufacturing organization? It has to follow a few steps and a set of tools.

Identify waste

According to the lean manufacturing philosophy, waste always exists but the process can always be improved. Lean manufacturing relies on this fundamental philosophy of continuous improvement.

Analyze the waste, and find the root cause

For each waste identified in the first stage, figure out what's causing it by using Root Cause Analysis.

Solve the root cause, and repeat the cycle

Using an appropriate problem-solving process, decide what the organization must do to fix the issue to create more efficiency.

Some of the principles used in lean for the reduction of wastes are those shown below

Lean Manufacturing

Aswathy Ravindran

Some of the major advantages of lean manufacturing that most of the companies including Toyota witnessed are reduction in manufacturing time, increases in manufacturing productivity, reduction of wastes which will inturn boost up the profit earned by the firm and standardized culture in organizations.

Although lean is a significantly more efficient and effective way to run a manufacturing plant, a large survey conducted by Industry Week in 2007 found that only 2 percent of companies that have a lean program achieved their anticipated results. The research also showed that many of the once successfully lean implemented companies, had not sustained a successful performance. For example the Toyota plant is rich with many great ideas, but none of them are standardized and are implemented in different ways in different plants. So what is important is choosing ideas and tools that best suits the organization and its products. So continuous improvement is a way to achieve things that we don't necessarily know how we are going to achieve. And lean is all about continuous improvement!!

http://www.forbes.com/sites/stevedenning/2011/02/05/why-lean-programs-fail-where-toyota-succeeds-a-new-culture-of-learning/

http://ezinearticles.com/?The-Advantages-of-Lean-Manufacturing&id=784987

http://www.mindtools.com/pages/article/newSTR_44.htm

Kanban & Kaizen

Roshna Goerge

Derived from the combination of two Japanese words, kan ("visual") and ban ("card" or "board"), kanban translates to sign board or signal board .In English it has developed a highly specialized meaning - kanban is a process of manufacturing or work space organization that relies upon visual signals to control inventory. Kanban has become synonymous Just in Time production and "demand scheduling." Kanban, as a means of manufacturing, was developed by Toyota during the late 1940s and early 1950. This has come to be used in the English language to represent a family of different production & inventory control systems and methods which signal (communicate) some or all of the following:

what parts to manufacture,
when to start manufacturing,
when to stop manufacturing,
how many to manufacture, and
where to deliver them to.

How does it Work?

Kanban works automatically on a pull systems (customer orders and inventory withdrawals) to automatically schedule more production without intervention of Supervision nor Planning & Scheduling Department personnel.

After careful analysis of the manufacturing process (at the intended location of the improvement, as well as upstream, and downstream),

The optimum number, size, and type of bins to be used for storing and transferring product is determined.

The quantity of product that will be contained within each bin is calculated

The type of Kanban is determined.

Kanban & Kaizen

Roshna Goerge

What are the Benefits?

Today, inventory is often seen as waste, evil, and very expensive. Most leading authorities suggest that inventory loses 50% of its book value each year (100%, 50%, 25%, 12.5%, etc.) due to the costs of storing, counting, dusting, shrinkage (theft), damage, insurance, obsolescence, and many other costs. Certainly, it isn't the same asset that Accountants allow to be entered onto the financial books at its selling price, or purchase price.

With a properly implemented Kanban, inventory tends to be reduced to less than 30% of the initial level while maintaining the same level of order fill, shorter lead time for customer orders, and same service level for customers. The 70% of inventory that is no longer needed can be sold at full price, putting the windfall cash flow into the bank where it belongs (instead of gathering dust as inventory on the shop floor).

With Kanban, workers tend to be self-paced, more in-control of their job, and less frustrated.

Once the system is operating well and stable, Kanban can be used as a simple, powerful tool for forcing on-going improvements in the manufacturing process. By removing one of the Kanban cards after the system is stabilized, Supervision can de-stabilize the system in a controlled manner, forcing it to find a way of regaining stability through further process improvements. If the improvement cannot be made immediately (ie. technological limitation), the Kanban card can be quickly replaced, and the system re-stabilizes at its previous status. By this means, Supervision and workers can work together to maximize the rate of process improvement. Kanban training & implementation support for Workers, Foremen, Supervisors, Engineers, and Managers to achieve minimum inventory levels and maximum responsiveness to the rapidly changing needs of the customer.

Kaizen: Japanese for "improvement", or "change for the better" focuses upon continuous improvement of processes in manufacturing, engineering, and business management.The Japanese word "kaizen" simply means "good change", with no inherent meaning of either "continuous" or "philosophy" in Japanese dictionaries or in everyday use. The word refers to any improvement, one-time or continuous, large or small, in the same sense as the English word "improvement". However, given the common practice in Japan of labeling or business

Kanban & Kaizen

Roshna Goerge

improvement techniques with the word "kaizen" (for lack of a specific Japanese word meaning "continuous improvement" or "philosophy of improvement"), especially in the case of oft-emulated practices spearheaded by Toyota, the word Kaizen in English is typically applied to measures for implementing continuous improvement, or even taken to mean a "Japanese philosophy" thereof. The discussion below focuses on such interpretations of the word, as frequently used in the context of modern management discussions. The Toyota Production System is known for kaizen, where all line personnel are expected to stop their moving production line in case of any abnormality and, along with their supervisor, suggest an improvement to resolve the abnormality which may initiate a kaizen.

The PDCA cycles—The cycle of kaizen activity can be defined as:

- Standardize an operation and activities.
- Measure the operation (find cycle time and amount of in-process inventory)
- Gauge measurements against requirements
- Innovate to meet requirements and increase productivity
- Standardize the new, improved operations
- Continue cycle *ad infinitum*

This is also known as the Shewhart cycle, Deming cycle, or PDCA. Other techniques used in conjunction with PDCA include 5 Whys, which is a form of root cause analysis in which the user asks "why" to a problem and finds an answer five successive times. There are normally a series of root causes stemming from one problem, and they can be visualized using fishbone diagrams or tables.

Kanban & Kiazen

Roshna Goerge

The five main elements of kaizen

Management teamwork
Increased labor responsibilities
Increased management morale
Quality circle
Management suggestions for labor improvement.

MediaTek unveils new smartphone platform

MediaTek Inc., Taiwan's largest handset chip designer, has launched its next-generation, dual-core smartphone platform, the MT6572.

It is the world's first dual-core SoC (system-on-a-chip) with integrated Wi-Fi, FM, GPS and Bluetooth functions targeted at the entry segment and also enables a cost-effective 4-layer PCB design.

The cost optimized new chip will help drive down entry-level smart phone prices and stimulate consumers around the world to change their smart phone models. The new MT6572 also integrates advanced multi-mode 3D Graphics, support for up to HD 720p video playback and record, and 5MP camera.

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Udbhava is the official newsletter of Kenosys - the Lean Operations and Systems club of Kengeri Campus. It's objective is to keep everyone up-to-date on the latest happening in the worlds of Lean Operations and Systems

The word KENOSYS is derived from the Greek word Kenosis which means self-emptying of one's own will and becoming entirely receptive to God's divine will, to eulogise the benefit of the group than to self and to contribute to common good than to individual goal. In our context it means to spread knowledge among our fellow LOS students. The word was slightly modified from Kenosis to Kenosys so that it goes with Kengeri Operations System.

The Kenosys club is an initiative by the students of LOS (Lean Operations & Systems) of Christ University Institute of Management, Kengeri. Kenosys stands for KENgeri Operations and SYStems. Kenosys represents the Lean Operations and Systems (LOS) club of MBA students at Kengeri campus of Christ University. The club is the brain child of 2010-12 batch of MBA-LOS student.

Kenosys is a LOS student's initiative which organises LOS related student activities so that value addition happens to LOS students in addition to course curriculum. This is also a platform for LOS students to showcase their talents in organising events. The regular activities under Kenosys are Udbhava news letter, corporate interface, Workshops, panel discussions etc. Under Kenosys platform, students are encouraged and supported for their innovative and creative value addition exercises in the arena of Lean Operations and Systems.