

# Army robots can get itself up

**U.S.** Army Research Laboratory (ARL) and Johns Hopkins University (JHU) Applied Physics Laboratory (APL) researchers have developed software to ensure that if a military robot falls to the ground, it can right itself.

The team applied software to the Advanced Explosive Ordnance Disposal Robotic System (AEODRS), a new line of Explosive Ordnance Disposal robots with a modular open systems framework.

The technology is crucial for keeping soldiers safe. The last thing military personnel needs is to leave the safety of a vehicle, for example, to adjust an overturned IED-seeking robot.

“One Soldier told me that he valued his robot so much, he got out of his vehicle to rescue the robot when he couldn’t get it turned back over,” said ARL researcher Dr. Chad Kessens, in a statement. “That is a story I never want to hear again.”

JHU/APL researcher Galen Mullins said the new software relies on an adaptive sampling algorithm that seeks transitions.

“We were looking for states where the robot could transition from a stable configuration to an unstable one, thus causing the robot to tip over,” said Mullins. “My techniques were able to effectively predict where those transitions might be so that we could search the space efficiently.”

The team found the software permitted AEODRS robots to right themselves on level ground, irrespective of their initial state.



## Ramco ERP helps Bank Islam go live

**Chennai:** Global enterprise software specialist, **Ramco Systems** announced the successful go-live of its Enterprise Resource Planning (ERP) Suite at Brunei’s largest bank and flagship Islamic financial institution **Bank Islam Brunei Darussalam Berhad (BIBD)**, to integrate business processes and planning across entire organisation.

The project, which marked Ramco’s entry into Brunei, involved automation across multiple departments, ensuring seamless flow of information. Ramco ERP software now automates and optimises BIBD’s purchasing, procurement, inventory and finance functions across 17 branches, benefiting more than

900 employees.

**Tahir Muzaffar, Head of Strategic Projects, Bank Islam Brunei Darussalam,** said, “The digitisation of our back-end operations and manual processes is a significant step forward enabling us to streamline our services and workflows. We can now easily reconcile payments and authorise transactions on the go. With the ERP, we look forward towards providing our stakeholders a truly modern banking experience with the improvements of offerings.”

Commenting on the go-live, **Virender Aggarwal, CEO, Ramco Systems,** said, “We are glad to have improved Brunei’s leading

financial institution digital capabilities with comprehensive, mobile-friendly back-end infrastructure solutions. Our successful partnership with Bank Islam Brunei Darussalam is another achievement for us that cements our position as one of Southeast Asia’s most reliable and innovative cloud enterprise software providers.”

Ramco ERP has been delivering significant innovation, cost savings, and superior business processes to global organisations. Ramco’s focus on usability, context-awareness, mobility, overall flexibility and comprehensive functionality has enabled smooth technological transitions for customers.

## AI breaks unemployment

**UK:** AI is expected to create as many jobs as it destroys. Contrary to popular belief, Artificial Intelligence and related technologies are projected to create as many jobs as they displace over the next 20 years, as per an analysis by PwC. To term it precisely, around 7 million existing jobs could be displaced, but around 7.2 million could be created, giving a small net jobs boost of around 200,000.

While the overall net effect of AI on the jobs maybe broadly neutral, this varies significantly across industry sectors. The most positive effect of AI is seen in the health and social work sector, where PwC estimates that employment could increase by nearly 1 million, equivalent to around 20 percent of existing jobs in the sector. On the other hand, PwC estimates that the number of jobs in the manufacturing sector could be reduced by around 25 percent, representing a net loss of nearly 700,000 jobs.

Major new technologies, from steam engines to computers, displace some existing jobs but also generate large productivity gains. This reduces prices and increases real income and spending levels, which in turn creates demand for additional workers. The analysis suggests that the same will be true of AI, robots and related

technologies, but the distribution of jobs across sectors will shift considerably in the process.

Healthcare is likely to see rising employment as it will be increasingly in demand as society becomes richer. While some jobs may be displaced, many more are likely to be created as real incomes rise and patients still want the ‘human touch’ from doctors, nurses and other health and social care workers.

On the other hand, as driverless vehicles roll out across the economy and factories and warehouses become increasingly automated, the manufacturing and transportation and storage sectors could see a reduction in employment levels.

The ways in which individuals, businesses and the government engage with AI and new technologies will affect how many jobs are created and how much it contributes to the economy.

People are understandably worried about the impact of AI on jobs. The research by PwC highlights where the biggest impacts will be and which areas are most vulnerable so that businesses and government can plan how best to help people develop the skills that will prepare them for the future. As the analysis shows there will be both winners and losers. But the percentage of winners will be more than the losers.



## Apps to send alerts in case of landslides

**Kolkata:** From now on, whatsapp messages and sirens on mobile phone apps will alert inhabitants of three most landslide-prone villages of the country, at the slightest signals of landslides.

The Geological Survey of India (GSI) has recently developed a Landslide Early Warning System (L-EWS) for the people of Giddapahar, Paglajhora and 14th Mile villages in Kurseong block of Darjeeling District in association with the district administration of West Bengal government, GSI Director Ashish Nath said.

The L-EWS is connected to mobile apps for fast dissemination of the alert to the people.

The system installed by the GSI in select villages, mostly in Kurseong block, has already started working.

“After the immense loss of life and property in these three villages since 2003 mainly because of landslides, we decided to install the system here first,” the director said.

Studying the Kurseong area utilising the modern InSAR technology by placing five corner reflectors and rainfall threshold analysis for landslide initiation resulted in the development of the people-centric L-EWS, he said.

Earlier, in case of landslides triggered by rainfall, the GSI used to alert the administration and then



it used to be passed on to the local population.

“But we felt there must be a change and we should alert the possible victims as soon as there is a trigger. We believe, this will help us in saving more lives,” he said.

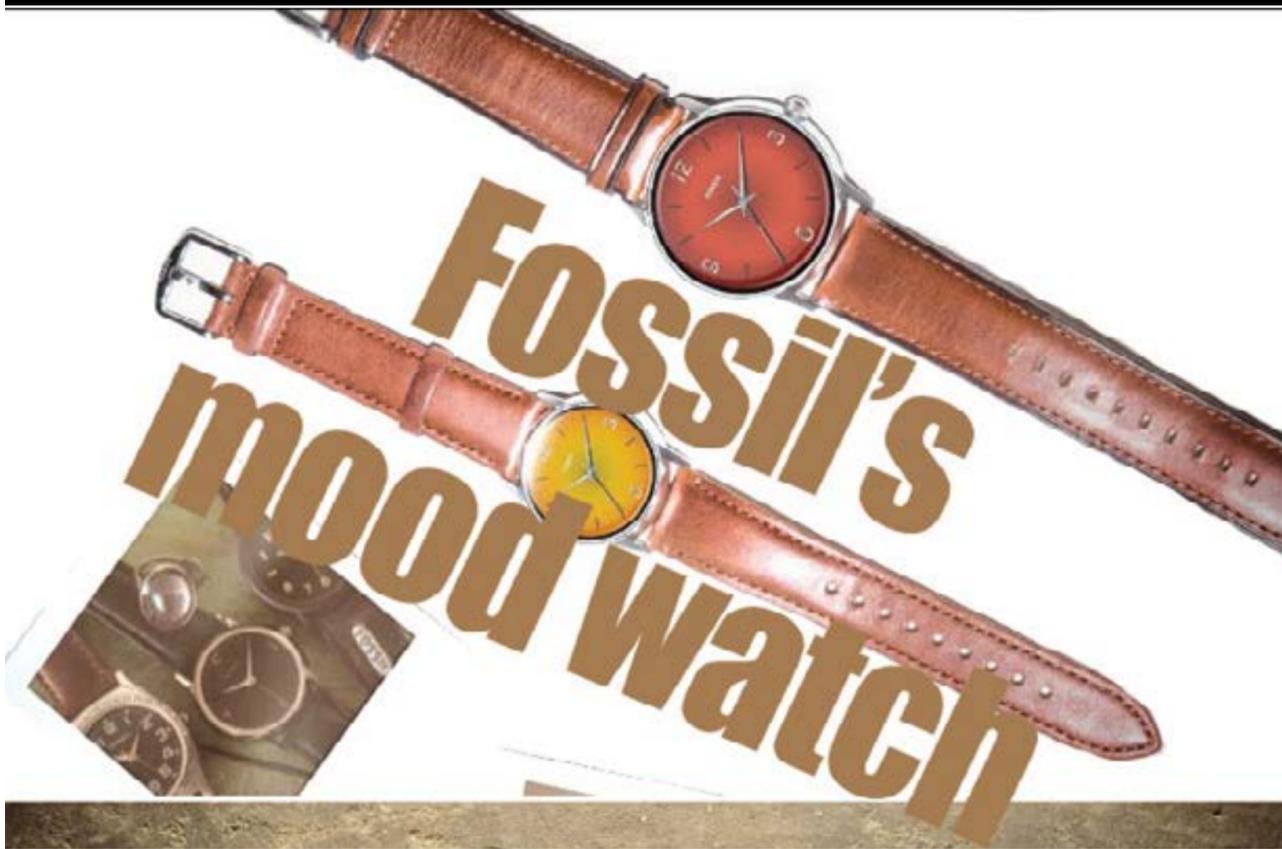
Eighteen such zones have been marked as extremely vulnerable to landslides and the three Darjeeling villages, where the warning system has been installed were on top of the chart, he stated. “The difficulties are coupled with the variability in the intensity of trigger thus making forecasting quite difficult for the

purpose of alerting the community at risk.

So the need of putting community-based landslide warning system was felt,” he said.

In fact, before the deployment of the system, a few rounds of community landslide awareness programme, including mock-drills, were also conducted, Nath said.

A billboard showing details of landslide warning has been also erected in two places one at Giddapahar and another at Paglajhora to spread awareness among the people.



Fossil, the original innovator of the fashion watch brought back the brand's 1996 classic: The Mood Watch featuring Fossil's signature color changing dial, where the colour shown reflects the mood of the wearer. This marks the first time Fossil re-issued a 90s favorite from their archives, taking watch wearers back to those nostalgic days

when color changing retro-inspired accessories were all the rage from Fossil's Archival Collection, the watch spotlight the 90's culture and style. The mood watch is defined by a minimal case that further highlights the color changing properties of the dial. The case is paired back to an amber leather strap, making for a versatile watch

with all the charm of the original. Featuring a range of six color moods, the decoder on the case back defines the following: Black (Anxious/Excitable), Blue Green (Relaxed/calm), dark blue (Happy/love), Green (Sensitive), Amber Green (Troubled/ Uneasy) & Amber (nervous/tense). This mood watch is available in fossil.com for Rs 8,995.

## Sensor to detect foetus heart beat

Scientists have developed an effective sensor that can allow pregnant women to measure the heartbeat of their unborn baby from the comfort of their homes. The tool developed by the researchers at the University of Sussex in the UK could help detect heart-related congenital disorders during pregnancy or highlight the need for medical interventions due to complications such as premature delivery or umbilical cord compression.

The technology would also greatly benefit women experiencing high-risk pregnancy factors, such as high blood pressure, diabetes, preeclampsia, and gestational high blood pressure, who require regular monitoring to ensure the wellbeing of their baby.

Currently, expectant mothers with health concerns about their babies have to go through the stress of going to the hospital to check on the heartbeat of their child. With this new technolo-

gy, they will be able to do this from the comfort of their own home.

The research is the first significant update in the technology used to measure babies heart rate for 40 years. Although there are some home-based foetal electrocardiograms available commercially, they are considered not suitable for daily or medical use because of concerns around their accuracy and portability.

This new technology will give



peace of mind in providing answers very quickly and ultimately ensuring the baby's wellbeing.

It also removes the need for a special gel to be applied to the skin.

With this new heart monitor, expectant mothers can get reassurance that their baby is doing fine within a few seconds, removing the unnecessary stress and worry that waiting for a hospital scan that currently involves.



## Folding vehicle to hit the roads

A car that can adjust its size according to need, and shrink when you've reached your destination, has been a dream for many. An Israeli start up, City Transformer is attempting to make a combination between a car and a motorbike.

The vehicle it is developing has four wheels and a chassis that can expand from 1 meter to 1.44 meters in width, transforming itself from a motorbike to a small car and vice versa.

In City Transformer's four-wheel vehicle, the bottom platform, the chassis, is foldable and can widen or narrow according to need, while the cabin remains unchanged in size. When the platform is open the vehicle offers the stability and driving experience of a small car, said Meridor. It has a roof and sides, and there is room for a passenger in the back. It comes equipped with airbags and air conditioning and other car comforts. In its narrow form, the vehicle is the size of a motorbike but with four wheels. The vehicle runs up to 45 kilometers an hour in its narrow mode and up to 90 kmph when wide.



## 3D printer can be used in microgravity

**London** The European Space Agency (ESA) has developed a 3D printer that can be used in weightlessness to make parts on demand for repair and maintenance during long-duration space missions.

The Manufacturing of Experimental Layer Technology (MELT) project printer will operate from any orientation - up, down or sideways - in order to serve in microgravity conditions aboard the International Space Station (ISS), ESA said in a statement.

The printer has been designed to fit within a standard ISS payload rack, and to meet the station's rigorous safety standards, it said.

The MELT printer can print a wide variety of thermoplastics from ABS (Acrylonitrile butadiene styrene), as used in Lego, up to high-melting point engineering thermoplastics such as PEEK (Polyether ether ketone), which is robust enough to substitute for metal materials in some cases.

"This printer could be used to make parts on demand for the repair and maintenance of a long-duration orbital habitat," said ESA materials and processes engineer Ugo Lafont. "This printer would also benefit human bases on planetary surfaces. Crucially, it can also print using recycled plastics, allowing a whole new maintenance strategy based on closed-loop reuse of materials," Lafont said.



## Robotic herding of bird's flock

Researchers have come up with a new algorithm for enabling a single robotic unmanned aerial vehicle to herd a flock of birds away from a designated airspace. This approach allows a single autonomous quadrotor drone to herd an entire flock of birds away without breaking their formation.

The team developed the herding algorithm on the basis of macroscopic properties of the flocking model and the response of the flock. They tested their robotic autonomous drone by successfully shepherding an entire flock of birds out of a designated airspace near KAIST's campus in S.Korea.

Bird strikes can threaten the safety of airplanes and their passengers. Airports and researchers have continued to reduce the risk of bird strikes through a variety of methods. However, birds are smart. They have the capability to interact with flying objects. Therefore airports are trying to transform into smart airports by adapting this new algorithm.

For this study, two drones were deployed. One drone performed various types of maneuvers around the flocks as a pursuer of herding drone, while a surveillance drone hovered at a high altitude with a camera pointing down for recording the trajectories of pursuer drone and the birds.

During the experiments on egrets, the birds made frequent visits to a hunting area nearby and a large number of egrets were found to return to their nests at sunset. During the time, the team attempted to fly the herding drone in various directions, with respect to the flock.

The drone approached the flock from the side, when the birds noticed the drone, they diverted from their original paths and flew at a 45° angle to their right. When the birds noticed the drone while it was still far away, they adjusted their paths horizontally and made smaller changes in the vertical direction. In the second round of the experiment on loons, the drone flew almost parallel to the flight path of a flock of birds, starting from an initial position located just off the nominal flight path. The birds had a nominal flight speed that was considerably higher than that of the drone so the interaction took place over a relatively short period of time.

This is just the first step, for the next step, more systems will be developed and integrated for bird detection, ranging, and automatic deployment of drones.

## MIT unveils robotic fish

In a new study published in Science Robotics, researchers at MIT unveiled that they have built a most advanced robotic fish. Armed with a camera and a lifelike wiggle, the device could one day help biologists monitor the health of marine habitats without stressing out their aquatic denizens.

The robotic impostor swam through the crystal blue waters off Fiji, blending in with the fish teeming around the coral reefs.

The Soft Robotic Fish, SoFi for short, is 18.5 inches long from snout to tail and weighs about 3.5 pounds. It can dive 60 feet underwater and is powered by 40 minutes of exploration.

The robot was designed to make sure that it's moving to conserve the life that it is trying to observe.



Future versions of SoFi will also improve the fish's swimming and vision, and its creators say they're sketching out plans for SoFi "swarms", schools of artificial fish set loose to monitor ocean health, perhaps recharged by solar-cell platforms floating on the water's surface.

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## Facebook Messenger 4 Launched

Facebook announced an overhaul of its Messenger smartphone app in an effort to simplify the service for its 1.3 billion monthly global users.

The social network began rolling out a redesigned version featuring three tabs instead of nine, saying it was "going back to its roots" seven years after the standalone app's launch.

"We build one feature after another; they're piling up," Messenger chief Stan Chudnovsky said of the service, which has grown from a simple messaging app to one that lets users make video calls, send money and more.

The updated tabs allow users to navigate between their conversations under "Chats," stories and contacts at "People," and "Discovery," which is devoted

to games and exchanges with businesses.

Facebook has positioned Messenger as a tool for businesses to efficiently handle customer questions or concerns.

Talking to customers via the app is free - but businesses can also pay for Facebook ads that let customers start a conversation or visit their page with one click.

Messenger is part of Facebook's effort to expand outside the social network - particularly when it comes to staying relevant to mobile lifestyles and younger people, who have been moving away from the service.





# Hit the road with Solar gadgets

## Portable solar computer

Become a digital nomad with a portable solar computer. There's no need to connect to a power socket when you've got a solar powered computer.

Developed to improve education in developing countries, it also comes in very handy if you're a digital nomad. Surprisingly affordable, the laptop only takes two hours of charging to deliver eight to 10 hours of use, plus it's also waterproof. So there is no need of carrying a charger along with you anymore.



## Solar Camera Strap

Avoid dead camera batteries by putting a strip of solar panels on your camera strap. Simple, and rather clever, right?

That's exactly what Weng Jie's Solar Camera Strap does, although in coming up with the design he forgot an important point: you can't charge batteries while they are in the camera.

While some cameras come with charging docks or have their chargers built in so you just have to plug in a cable, most require a separate charger into which you pop the battery: a far better solution which doesn't put your camera out of action as it juices up. Weng's device runs the power generated by the strap into the camera's DC-in socket via cable.

This would let you use the camera as long as the light is bright, but there'd be no buffer if the Sun were to dip behind a cloud.

## Solar plug socket

Keep your mobile charged on the run with a solar plug socket. The solar plug socket uses solar panels to absorb radiation from the sun and store electricity, so you can simply plug in your charger and top up your battery wherever you happen to be.

One side of the socket has a suction cup so that you can attach it to glass and don't have to hold it while your phone charges.

Availability and price of this socket is yet to be announced, but if it becomes available, it will certainly be a game changer when it comes to electricity.

## Solar powered bike paths

Power the neighbourhood with solar powered bike paths. We all know how much the Dutch love their bikes, so it was no surprise when one Dutch town, Krommenie, decided to add an extra element to one of its bike lanes. Solar panels were embedded inside tempered glass along the bike lane for a distance of 328 feet, turning the whole path into an energy generator.

The SolaRoad performed even better than had been predicted, generating almost 10,000 kilowatts of power, which is capable of running three homes for a whole year. It's hoped that as the technology progresses, the power harnessed can be used to power street lighting, traffic lights, and maybe even electric cars.

## Portable solar kitchen:

Cook on the go with a portable solar kitchen. If you enjoy heading outdoors and cooking up a feast, you'll love the portable solar cooker, which uses energy from the sun to achieve temperatures of up to 290 oC. This means you're able to cook literally whatever you like within 20 minutes, whether you prefer to boil, fry or bake.

They solve the problem of polluting the environment while cooking outdoors with fossil fuels by revising a tested method of using solar energy to cook for us. Furthermore, typical problems that we face today such as finding fuel and cleaning up associated using non-reusable resources are all eliminated with the solar cooking. Lastly, by adapting an already popular method of slow-cooking to the outdoors together with using smart technology, the supervisory role of the chef is no longer required, making the outdoor dining experience truly stress free.

## Solar backpack

Hit the road with a solar backpack. Never again will your phone or tablet battery run down while you're travelling if you pick up a solar backpack. As long as there's some sunlight, it will generate enough power to keep you connected.

There are many different solar backpacks available, including the Unplug Solar Backpack which comes with a wide range of mobile phone connectors for different models.

The outside of this is covered with enough solar panels to charge smartphones, mp3 players and other small devices with just 3 hours of exposure to the sun.

## New material to harvest cheaper solar power

Washington: Scientists have developed a material that can be used to harvest electricity from the Sun's heat, paving the way for generating cheaper solar power on cloudy days and at nighttime.

The innovation is an important step for putting solar heat-to-electricity generation in direct cost competition with fossil fuels, researchers said.

"Storing solar energy as heat can already be cheaper than storing energy via batteries, so the next step is reducing the cost of generating electricity from the Sun's heat with the added benefit of zero greenhouse gas emissions," said Kenneth Sandhage, a professor at Purdue University in the US.

Concentrated solar power plants convert solar energy into electricity by using mirrors or lenses to concentrate a lot of light onto a small area, which generates heat that is transferred to a molten salt.

Heat from the molten salt is then transferred to a "working" fluid, supercritical carbon dioxide, that expands and works to spin a turbine for generating electricity.

To make solar-powered electricity cheaper, the turbine engine would need to generate even more electricity for the same amount of heat, which means the engine needs to run hotter.

The problem is that heat exchangers, which transfer heat from the hot molten salt to the working fluid, are currently made of stainless steel or nickel-based alloys that get too soft at the desired higher temperatures and at the elevated pressure of supercritical carbon dioxide.

Researchers conceived a composite of ceramic zirconium carbide and the metal tungsten for more robust heat exchangers.

They created plates of the ceramic-metal composite. The plates host customisable channels for tailoring the exchange of heat.

Mechanical tests and corrosion tests showed that the composite material could be tailored to successfully withstand the higher temperature, high-pressure supercritical carbon dioxide needed for generating electricity more efficiently than today's heat exchangers.

An economic analysis also showed that the scaled-up manufacturing of these heat exchangers could be conducted at comparable or lower cost than for stainless steel or nickel alloy-based ones.

"Ultimately, with continued development, this technology would allow for large-scale penetration of renewable solar energy into the electricity grid," Sandhage said.

"This would mean dramatic reductions in human-made carbon dioxide emissions from electricity production," he said.

# Device integrates solar cell and battery to store power outside the grid

Scientists in the United States and Saudi Arabia have harnessed the abilities of both a solar cell and a battery in one device -- a "solar flow battery" that soaks up sunlight and efficiently stores it as chemical energy for later on-demand use.

While sunlight has increasingly gained appeal as a clean and abundant energy source, it has one obvious limitation -- there is only so much sunlight per day, and some days are a lot sunnier than others. In order to keep solar

energy practical, this means that after sunlight is converted to electrical energy, it must be stored. Normally this takes two devices -- a solar cell and a battery -- but the solar flow battery is designed to perform like both.

"Compared with separated solar energy conversion and electrochemical energy storage devices, combining the functions of separated devices into a single, integrated device could be a more efficient, scalable, compact, and cost-effective approach to utiliz-



ing solar energy," says Song Jin, a professor of chemistry at the University of Wisconsin-Madison. Jin and his team developed the device in collaboration with

Jr-Hau He, a professor of electrical engineering at King Abdullah University of Science and Technology (KAUST) in Saudi Arabia.

The solar flow battery has three different modes. If energy is needed right away, it can act like a solar cell and immediately convert sunlight to electricity. Otherwise, the device can soak up solar energy by day and store it as chemical energy to deliver it later as electricity when night falls or the sky grows cloudy. The device can also be charged by electrical

energy if needed, just like a typical battery. The team's most recent solar flow battery model is able to store and deliver electricity from solar energy more efficiently than any other integrated device currently in existence.

Jin believes the solar flow battery could help transcend the limitations of the electrical grid by making electricity more readily available to people living in rural areas and providing an alternative source of energy when traditional electrical systems fail.

"If you can DREAM it, you can DO it."  
-Walt Disney

Future Bright

# The Consultant- The most sought expert today

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The consultancy Industry is the most sought out today among the most varied markets in the service Industry, and as everything is viewed as it has a wide array of advisors who are utilized in the business. Consulting is described as the demonstration of giving irreplaceable capability on an issue for a said expense. The organization can incorporate either advice or Implementation administrations. A specialist is required to take a free and reasonable position on an issue. An consultant can benefit any segment in an Organization.

The verifiable scenery of the consulting business goes back to the late nineteenth century, with the building up of the world's first present-day consulting affiliations, generally called business warning firms. Toward the start of the consulting business, the essential consultancies focused their warning organizations primarily on handling the specialized and fund related issue. Today consultancy firms offer an extensive variety of different organizations, traverse unlimited fields, controls and regions.

Consultancy firms are contracted to help their clients who are in a problem, for which an ace ability or learning is required which is by and large missing at the client's side. Another segment is that consultancy firms are a self-ruling body, which can give the client a target point of view on the issues their association fights with and can offer them an answer to the issue. Including a consultancy firm can similarly be more efficient than if an association were to utilize pros themselves. Also, an Organization does not have a satisfactory capacity to manage its change portfolio consistently, which ought to rather be conceivable just by getting a consultancy firm.

The consulting business comprises six noteworthy utilitarian regions: Strategy Consulting, Management Consulting, Operations Consulting, HR Consulting, Financial Advisory and Technology Consulting. Altogether, these six warning regions join with other administration regions frame in excess of 200 distinct fields of aptitude and recommendations. The Big 4 Consulting firms are Price Water house Coopers (PwC), Ernst and Young (E&Y), Deloitte, and KPMG.

Methodology Consulting: Over the span of ongoing decades, parts analysts have made unmistakable definitions with a particular true objective to arrange the diverse sorts of master dynamics in the field.

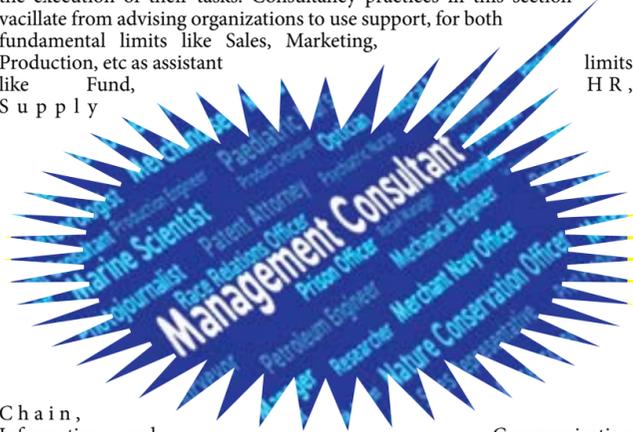
Imagine a case where you are the Boss: You are beginning to lose your sparkle of the general business on your lead item. Promoting office urges you to spend on Advertising and lessens costs. Innovative work has high trusts in another thing and needs more money. Back is worried over your obligation level. HR does not find enough qualified people to stem the downtrend. Additionally, you have as of late been offered to buy one of your adversaries. You can't choose.

In the first place, you'll have to settle on a suitable choice. By then, you'll have to settle on beyond any doubt that these choices will give you the phenomenal preferred standpoint. Perhaps you need to trim costs. Maybe you need to spend more to improve. In any case, whatever you do, you should demonstrate change over your rivals. This is the place the administrations of Strategy consulting assume control. The Business Strategy consulting is done at an abnormal state in the Organization with the Board individuals and the CEO. These are the ones settling on the choices, in view of this the Organization focuses on executing the decisions.

Methodology consulting is about facts and sound judgment significantly more than vision or dreams. Substances settle just on realities. Dreams without assurances make them harder. Methodology consulting is about realities and sound judgment significantly more than vision or dreams. Substances settle on decisions less requesting. Dreams without convictions make them harder.

One ought to comprehend procedure consulting is tweaked considering the reality what works for one association won't generally work for the other, even in a comparable industry. Strategists do use instruments, in any case, apparatuses don't make them strategist. Simply the idea of individuals makes them Strategist.

Administration experts are generally called business consultant, are specialists who focus on an extensive variety of legitimate process, stresses from framework to an arrangement of segments inside the administration. Activities experts will be consultant who empowers clients to upgrade the execution of their tasks. Consultancy practices in this section vacillate from advising organizations to use support, for both fundamental limits like Sales, Marketing, Production, etc as assistant like Fund, S u p p l y



Chain, Information and Communication Technology, Legal, Task Consultants shape the greatest area inside the admonitory division, and the lion's shares of consultant are dynamic inside one of the various essential working areas.

Consultants who work in the Financial Advisory segment work on inquiries that position cash related limits when in doubt, in like manner the descriptive or scientific capacities inside the association. Along these lines, the profiles of specialists dynamic in this segment can fluctuate essentially; from a corporate money related counsellor, it explores to hazard administration, impose appraisal, a land consultancy. Experts invested critical energy in logical research and reinforce banter furthermore fall under the Financial Advisory segment.

HR consultant assist clients with human capital request inside their Organization and help them with improving their execution of the HR office. HR consultants are similarly contracted by the organization to help change the business culture inside their organization or change their HR office. The principal subjects vital to the activity depiction of HR consultant are an authoritative change, change administration, states of work, training and advancement, ability administration and going to staff leaving the organization after the culmination of administration.

Innovation specialists generally called IT, ICT or advanced experts, focus on helping the clients with the improvement and utilization of Information Technology inside their Organization. The bigger piece of ICT-guides makes a go on usage ventures, for instance, wide ERP structures applications, where their part may change from task figuring out how to process administration or joining of the framework.

Consulting is necessary to react to customer demands. This suggests advisors will habitually have no finishes of the week, might be because there's an incredible systems administration opportunity at a client work held all through the week's end, or, they're chipping away at the proposition for the following customer.

Consulting calling isn't exactly the equivalent as a salaried activity that not a lot of experts can have a strict time plan mentality. Despite the likelihood that their office is far from their home, they contribute hours there reliably of the day or night, responding to a client ask for, or be imagining one. It's various because on the opposite side to everything that can't avoid being that experts can deal with the occasion on a working day sporadically to go shopping, go to a capacity. Despite the fact that Consultants are paid heavier, they additionally keep running into obfuscating at times all things considered sum isn't accommodated.

How one can turn into a Consultant? As an issue of first significance, as indicated by consultancy UK, any consultancy firms will require the applicant meets, including their level of instruction. The courses taken isn't generally the most significant factor, so paying little heed to the likelihood that you didn't take the customary way and graduated as MBA, you can enter the calling of consulting with an alternate degree, establishments in law, or Psychology.

As a Consultant, you are depended upon to have unfathomable critical thinking and problem-solving aptitudes. In light of the available data and time, you need to find the opportunity to appreciate the mind-boggling challenges posed by clients in a short range and find sensible responses for demonstrating them. At an aggregate absence of data to break up, consultant ought to have the ability to make sensible examinations in perspective of logical reasoning. Consultant, for the most part, gets a high condition of commitments inside the group. In that case, the objectives of the group remain the best need.

Consultants are required to bring incredible presentation capacities even under pressure from the client. Some client assignments and undertakings will go with sharp due dates whereby versatility is typical from consultant and furthermore working longer hours when it is vital. In various events, the consultant needs to take extraordinary measures for a client, for example with a redesign which can cause staff, people or partners to put consultant under high mental strain.

With the rising of digitalising and furthermore into Automation, Big Data, Cloud software the Analytics enthusiasm for symptomatic and quantitative capacities among the consultant are demanding. Consultants as often as possible direct research through their ability to amass and dismember information and present their disclosures to clients, which shape a basic capacity for consultant nowadays. Consultants are viewed to have an abnormal state of scholarly intrigue. Seeing as they in many cases work in various divisions and particular points, it is of most extraordinary enormity that consultants are prepared for finding a direct answer for complex issues. Leadership is another basic quality that consultant need. Other than directing particular endeavours and obligations, the consultant needs to demonstrate Leadership toward their client in light of their approach to manage an issue and have the ability to make them anchored. They ought to be enterprising and exhibit enough action. Since consultants are perseveringly clamouring to deal with regularly complex issues they continually need to discover methods for enhancing and make an interpretation of them into solid marketable strategies.

## Scope in geospatial engg

GIS is fast becoming a part and parcel of our daily lives. Whether it is reaching a particular address in time or making deliveries, Geographic Information Systems are the most obvious choice. Thus, there is an increase in demand for professionals in this field with increase usage of the technology.

Geospatial technology is about assembling, storing, manipulating and displaying geographically referenced data. It is used just about everywhere — from

digital map making, site selection, finding the best routes, solving environmental problems, exploring natural resources, urban planning and solutions for other problems. As for the job prospects, besides private companies, major employers in the GIS sector are the central and state governments as well as defence services. Job profiles in GIS range from project manager, project scientist, technical assistant, research associate, GIS environment/business analyst, GIS engineer, GIS programmer, etc.

## Curiosity takes HR executive to new heights

What's the most important skill a senior HR practitioner needs to have right now?

While there are many that could be listed, curiosity is an increasingly important trait for HR professionals, according to Nada George, VP, HR in a pan Asian firm..

George says that as simple as that sounds, it's about more than just demonstrating a keen interest in learning and asking a couple of questions.

"As confidantes, as coaches and as people leaders ourselves, we solve problems every day and it's easy to get comfortable with how we do that and comfortable with the credibility we already have with the relationships in the business," said George.

"But issues are becoming increasingly complex and asking more questions and better quality questions I think helps us better scope the problem and also get much clearer on the context.

"That means we have better information about data to help us make decisions. We understand the context and relationships better and ultimately, we hold ourselves to

bringing an objective lens to the matters that we are involved in."

So looking back over the past twelve months, what does she think her best personal work achievement has been?

One of the things George is most proud of is actively partnering with one of their sales GMs to understand the organisation holistically and identify opportunities for HR to go in and optimise it.

"Ultimately, we set out to improve the return on investment of new hires and that meant that we had to build a competency and behaviour level framework and better assess the capabilities of his current team and new team members," said George.

"We implemented the model this year. It will lead to reducing our time to hire and it will accelerate the performance of our new hires. It allows us to design targeted development solutions for them.

"I think HR can build a lot of credibility when we can demonstrate tangible outcomes that drive business results."

## Neo work force is here!

"They can't remember life without a smartphone," culture and compensation data platform Comparably describes the newest members of the workforce: Generation Z.

Born between the mid-90s and early 2000s, Gen Z are beginning to enter the workforce and gravitating to mostly technology-centric jobs.

Comparably compiled 15 of the most popular jobs (and salaries) where this digital-savvy generation thrives:

- Mobile developer
- Data scientist
- Product manager
- Developer
- DevOps engineer
- UI/UX designer
- Financial analyst
- Business analyst
- System administrator
- Operations manager

Their salaries in dollar terms ranges betwee \$40000 to \$100000 per annum.

The entry of Gen Z workers also signals a shift in the way the future workforce will view important workplace issues such as employee wellbeing, work-life balance, harassment and the #MeToo and #TimesUp movement, as well as the advent of artificial intelligence and cryptocurrency:

- 64% said they are satisfied with their work-life balance
- 67% believe the #MeToo and #TimesUp movement will lead to progress

- 58% believe the benefits of AI will outweigh the risks
- 40% believe cryptocurrency is a scam

Comparably analyzed workforce trends based on more than 2,000 anonymous responses from people aged 18 to 25 working across the technology sector.

- Account manager \$59,229
- Sales rep \$53,891
- Technical support manager \$50,306
- Marketing associate \$50,185
- Customer service rep \$43,924