

Newsletter 2017 Issue I



**Bharati Vidyapeeth's
Institute of Management and Information Technology
Navi Mumbai**

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INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY
NAVI MUMBAI**



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BVIMIT fortifies student's intellectual awaking and social transformation in different spheres that makes them to contribute to the organization and world as well. We strengthen student's hard work and commitments towards knowledge.

BVIMIT provides MCA, VI semester course enables overall development of students and give a different perspective towards corporate life.

Current newsletter entitled "**PRABHAT-exploring tech rising star**" is a combined effort of students and staff members that commences articles on emerging technologies with theme as "**GREEN COMPUTING**" provides articles for the same.

I hope "**PRABHAT**" will take you to the world of prominent technologies.

Editorial Desk



Prof. Pratibha Deshmukh
Editor-in-chief

It is indeed a great honor to be the Newsletter Editor for me and also an immense pleasure to launch the first edition of BVIMIT Newsletter “PRABHAT- exploring tech rising star”.

As we are living in the technological era, we have selected the topic for the article as “**GREEN COMPUTING**” to make students aware about this emerging technology. It aims to be a truly interdisciplinary platform seeking to bring together a range of diverse voices on the topic in order to stimulate discussion.

A huge thank you to all the students who contributed writing the articles, without which there wouldn't have been this newsletter.

I appreciate PRABHAT student members for their everlasting support throughout the creation of this edition.

I hope “**PRABHAT**” will convey some technical knowledge to you.



Shreyas Patole
Student MCA

Green Computing: Initiatives of Top Companies in the World

Green computing is the environmentally responsible and eco-friendly use of computers and their resources. In broader terms, it is also defined as the study of designing, manufacturing/engineering, using and disposing of computing devices in a way that reduces their environmental impact.

ENERGY STAR server consumed 54% less power than older model servers. Servers that earn the ENERGY STAR will, on average, be about 30% more energy-efficient than standard servers. In addition to using less energy themselves, ENERGY STAR-qualified servers substantially reduce cooling loads in data centers. A general rule of thumb suggests that one watt saved by a server has the added benefit of saving one to two watts of cooling power. It's important to note that these power savings come with a substantial increase in performance – at 50% utilization. More companies are shifting priorities by using business intelligence to not only save on costs but to also become environmentally aware. Business intelligence's ability to keep track of performance, as well as alert decision makers on behavioural changes, make it a complementary approach as demonstrated by the desire by many companies to become more eco-friendly. Even then, there is a need for a clear roadmap that will tie in business intelligence with green initiatives.

The continued depletion of natural resources has led corporations that have large energy requirements to become more environmentally aware than ever. This is because not only do green initiatives save on costs, reuse resources and meet compliance requirements, but they also help to create brand recognition among customers.

Top Companies Going Green in 2019

The motivation to go green has not only increasingly become part of many company's corporate social responsibility but also as an aspect of remaining relevant in the future business environment. Besides, there are more and more environmental concerns that can only be addressed through green initiatives in terms of production, servicing and manufacturing.

Companies are therefore seeking more innovative methods of promoting eco-friendly environments by integrating green practices in their business functions. The following are the top companies that are taking the lead in incorporating eco-friendly practices by going green.

1. McDonald's

McDonald's as one of the world's largest food stores is taking the lead in going green by incorporating the outcomes of fast foods on people's health while reducing their overall energy consumption. Particularly, the company uses energy-efficient appliances thereby cutting energy wastage by 25% during in their business activities. McDonald's have also set up green parking lots by preserving them for only hybrid vehicles. The parking lots equally have permeable concrete with the capability of recharging the vehicles and cleaning ground water. Furthermore, McDonald's use considerate means to obtain their animal products so as to limit their impacts on destroying animal habitats.

2. Dell

Dell is a leading manufacturer of computer equipment. With an aim of limiting environmental impacts, Dell has promoted the safe disposal of their products by coming up with an effective and efficient recycling program. Dell allows customers to give back any Dell-branded equipment to the company for free which encourages safe disposal and reduces the overall e-waste count. The company even accepts computers, printers and monitors from other brands for safe disposal.

3. Google

Google has also made some tremendous efforts in going green by slashing their energy usage and supporting green energy projects. For instance, Google has constructed the world's most energy efficient data centers and continuously campaigns for the need for energy conservation and the use of renewable energy sources as well as clean energy products. Google has supported and funded green energy projects by buying and installing numerous windmills and solar panels.

4. Bank of America

The Bank of America went green when it realized the need for promoting a sustainable environment. Within a period of five years, the bank was able to cut its paper requirements by 32%. The bank also started an internal recycling program and it has achieved success by recycling about 30,000 tons of paper every year. This translates into conserving about 200,000 trees. What's more, the company offers 3000 dollars cash-back reward to workers who shift to the use of hybrid cars.

5. Tesla Motors

Tesla Motors is a business involved in the manufacturing of cars that are eco-friendly. The amazing aspect about it is that it does so without forfeiting the power and speed of the cars. The electric powered cars made by Tesla Motors are very efficient and can go from 0 to 60 in just 3.9, with a tantamount of 256MPG from its electric output. The cars are sleek and their overall maintenance costs are also cost-effective.

6. Wal-Mart

Wal-Mart has made significant advances in positioning itself to further green courses in their supply chain operations. As one of the world's biggest retailers, the company startled many and its competitors when it placed a strict policy to cut off suppliers whose manufacturing, processing and distribution methods contributed to vast carbon emissions. The Wal-Mart retail stores also utilize 100% renewable energy sources and their transportation systems maintain on fuel-efficiency.

7. Honda

Honda has taken various steps to be 100% at par with their environmental protection duty as an auto company. The company has invested a lot of resources in producing fuel-efficient vehicles and is constantly seeking ways to develop a hydrogen fuel cell powered vehicle. As such, Honda is ranked as one of the most fuel-efficient auto producers in the US. At the same time, the company promises to cut down its carbon dioxide emissions. The company is also carrying out research with an aim of foreseeing a day when most cars will depend on hydrogen fuel as opposed to gasoline.

8. United (Continental Airlines before the merger)

The continental Airline (now United after the merger with united airlines) is another company that joined the worthy course of going green. It spent more than 16 billion US dollars to replace all their airplanes with those that are more fuel-efficient. This aimed at reducing emission by 5%. Further, since the year 2000, the airline has managed to reduce nitrogen oxide emissions by 75%. The airline has also employed about a dozen environmentalist staff members who work hand in hand with engine manufacturers to ensure more efficient processes and greener designs. The company also sorts its trash for recycling.

9. Tesco

Tesco, a British grocery supply chain company, is not left behind in integrating green elements in its processes. Specifically, it offers shoppers who return shopping bags savings. Besides that, the energy powering its stores is from wind power. It has also heavily invested on recycling, the use of biodiesel truck for making deliveries, and estimating its carbon footprint on each item sold to have a better approach towards environmental sustainability.

10. Brooks

Brooks has impressively joined the band wagon of green-oriented companies introducing a completely biodegradable running shoe. The shoe is as durable as the conventional ones that exist in the market. The technique used ensures the shoe only begin to biodegrade when it is in an active enclosed landfill. The biodegrading period takes 20 years as opposed to the conventional ones that take about 1,000 years. In other words, this approach can save up to 30 million pounds of landfill dumping within the same 20 year period.

11. S.C. Johnson

S.C. Johnson, a company dealing with the manufacture of household products, has also joined the league of green companies. Its mission is to lessen the implications its products have on the environment. On this account, the company has managed to reduce 1.8 million pounds of volatile organic compounds from its Windex artifacts and another 1.4 million pounds of polyvinylidene chloride from Saran Wrap. The company has minimized the use of coal to generate power by replacing most of it with natural gas.

12. Coca-Cola

Coca-cola has made substantial strides in narrowing down to three most-important environmental goals. These include water preservation, energy and climate protection, and sustainable packaging. These initiatives imply a determination to be environmentally conscious. Accordingly, Coca-cola is actively involved in community recycling programs, use of efficient energies in production and supplies, and green packaging designs.

13. Starbucks

Starbucks is known worldwide as a top-ranking coffee shop. Besides that, it's among the list of top companies that are going green. It has managed to do this by enforcing measures such as the bean-to-cup approach and the ingenious use of recycled coffee grounds in the making of their coffee tables. Starbucks is also in partnership with numerous environmental organizations, one of them being Earthwatch Institute, and continues to execute various environmental initiatives.

14. Toyota

Toyota, the world's largest car manufacturing company, has also come up with innovative cars that reduce the overall carbon footprint. One of the most outstanding cars is the Prius model which is also celebrated as the world's first mass-market hybrid vehicle. The car has been sold to more than 38 countries worldwide and even EPA has acknowledged its efficiency in terms of fuel consumption. In the UK, it is categorized as the third least carbon-emitting vehicle.

15. Pratt & Whitney

Going green takes many aspects. One of them is scaling back on the use of raw materials. This is particularly how Pratt & Whitney company has made it to the list of top companies that are going green. Pratt & Whitney has cut back 90% of its ingots in the jet engine blades manufacturing process. With the use of this creative method, Pratt & Whitney has managed to lower the amount of wasted ingots while at the same time significantly reducing factory emissions.

16. HP (Hewlett Packard)

Hewlett Packard is another computing company that has consistently undertaken sustainable manufacturing and processes to reduce the harm its products pose on the environment. Particularly, it has taken impressive steps in ensuring the current HP branded materials are 100% recyclable. It has also revamped its computer disposal strategy by opening various operational e-

waste recycling plants across the globe. Further, HP takes back computer equipments of all brands, and is committed to the use of renewable energy sources.

17. Target

Target has realized the positive outcome of keeping an eye on eco-friendly sound business practices. Target has devised an innovative way of going green by introducing an eco-clothing line. The eco-clothing line is fashioned and designed by environmentally sound and dynamic fabric which limits the over-reliance of raw products. The retail operations also prioritize on lighting conservation at its shopping centers. Furthermore, Target funds and supports various environmental sustainability programs in the areas of education and environmental conservation.

18. Apple

Apple and its partners are building new renewable energy projects around the world, improving the energy options for local communities, states and even entire countries. Apple creates or develops, with utilities, new regional renewable energy projects that would not otherwise exist. These projects represent a diverse range of energy sources, including solar arrays and wind farms as well as emerging technologies like biogas fuel cells, micro-hydro generation systems and energy storage technologies.

Apple currently has 25 operational renewable energy projects around the world, totaling 626 megawatts of generation capacity, with 286 megawatts of solar PV generation coming online in 2017, its most ever in one year. It also has 15 more projects in construction. Once built, over 1.4 gigawatts of clean renewable energy generation will be spread across 11 countries.

19. Ford Motor Company

Automotive companies are known to be among the heaviest polluters. However, Ford Motor Company is changing this narrative through their ten-part environmental policy that they have implemented for years. The company uses sustainable fabrics in its vehicles while 80% of both its Focus and Escape vehicles are recyclable. The company also focuses on fuel efficiency, particularly on the six-speed transmission, offering a clean diesel heavy duty pickup truck. Furthermore, the paint fumes in the company's plant in Michigan are recycled as fuel.

20. Disney

Disney is determined to please companies that have made it a giant by using zero net direct greenhouse gas emission policies within all its facilities. In addition, it is working at reducing the indirect greenhouse gas emissions through the reduction of electrical consumption. Disney also has a zero waste policy meaning that there is nothing that would end up in landfills. The entertainment giant also uses technology that saves water and is working on lowering the footprint of its product manufacturing and distribution. This is tied up to the company's policy of having a net positive environmental impact that has made Disney a leader in environmental responsibility.

21. Fisher Investments

The company has initiated the Redwoods and Climate Change Initiative that is aimed at contributing towards the preservation of California's native Redwoods through cutting down on emissions and gasses that threaten their existence. More specifically, the company employs a plethora of ways in helping the environment through materials, as well as adjustable thermostats. Ultimately, the company's commitment to reducing their footprint is unwavering.

22. Johnson and Johnson

For more than 20 years now, this company has taken the lead in manufacturing personal care products that are environmentally responsible. It also has initiatives that reduce waste in the course of manufacturing and distribution through use of sustainable products and packaging methods where possible. The company also owns a fleet of hybrid vehicles that it also operates.

23. Nike

Nike is keen to highlight the value of green initiatives through its advertising in addition to putting the great ideas into practice. Its line of sustainable products is made using environmentally preferred materials like recycled polyester. The company also uses renewable energy sources in manufacturing. Moreover, Nike has pressed 650 of its suppliers in 52 countries to develop and implement written environmental policies.

24. eBay Eco-Initiatives

This company has its focus on environmental sustainability. This company has made it possible for people to exchange or reuse goods instead of throwing them away; thus not only increasing the lifespan of these products but also keeping them off landfills. The company also has a classified section where users are able to sell or buy used furniture, household appliances as well as other items that are hard to ship within the local community. The company has also partnered with United States Postal Service (USPS) to ensure green supply when it comes to shipping. Together, these two entities are co branded in environmentally friendly Priority Mail packaging that has earned them Cradle-to-Cradle certification.

Overall, regardless of the initiatives that a company may embrace, businesses will do well to monitor these initiatives and identify ways of becoming more efficient over time.

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