Opportunities and Challenges in the Green IT Services Sector\textsuperscript{1}

Preeti Srivastav

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Abstract:

With the onset of sustainability movement² or the sustainability revolution³, the past five years have seen consumers; corporates and governments take steps towards acknowledging, addressing or challenging the same.

The IT sector which has always been the first to evolve with any new market trend has been playing a significant role in supporting all the stakeholders to achieve their sustainability objectives.

The “Green IT” sector is divided into the products and the services sector.

Almost all the large tech companies like Oracle, SAP, IBM, Accenture, and Cisco are a part of this industry offering various Green IT services.

With the Green IT Services sector is fairly new. There are various opportunities, challenges and threats that an organization needs to be cognizant of and prepared for before entering this sector. The paper analyses the steps and the initiatives that a traditional IT services and consulting firm has to undertake to move into this sector.

To understand the challenges and opportunities of this sector better, we will analyze a traditional IT services and consulting firm as a case study to map out the initiatives that can be undertaken by the company. In this paper, we have analyzed, Infosys Technologies Ltd., a leading IT services provider as a case study for this subject.

Market Overview:


Green IT includes software, products and services for the following key areas.4

- Software for collecting data across supply chain, infrastructure and operations
- Content Management of the collected data
- Green Data Center
- Reporting
- Clean Energy Applications
- Utilities Applications
- Automating common workplace activities and processes
- Cloud Computing
- Smart Grid Technology

Some of the key vendor criteria’s for a company to engage in sustainability consulting or Green IT industry are –5


The market estimates and forecast for 2010 and 2011 below show a promising and a growing market.
How to get there:

Every organization has to go through a set of initiatives and stages to enter the Green IT services market. How it utilizes its strengths to its advantage and mitigates its risks and threats defines its success and market share.

Below are the evolutionary stages for a company before it can enter the Green IT services market.
Collaborate

Collaboration and partnership is one of the successful ways most of the companies are entering the Sustainability Consulting and the Green IT services sector.

But even the largest software suppliers like SAP or CA are limited in how much consulting service they can provide. So they are linking up with the big IT services shops, forming design and implementation partnerships along the lines of the relationships that exist in well-established software product categories like ERP and CRM.

For example, Wipro is now working with SAP and has other ECEM vendor relationships in the works. PE International has signed on with Tata Consulting Services. CA is working with Deloitte Consulting. And we expect to see plenty more such partnerships, both loosely and tightly coupled.⁶

Establish Credibility

- Partnerships with GRI, CDP and established eco standard organizations

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- Partnerships with non-governmental environment organizations like UN Global Compact
- Be Green – Publish your own sustainability report
- Green your own operations
- Get recognized for green efforts through rankings, ratings and indices. E.g. Newsweek Green rankings

**Conclusion –**

Once an organization goes through the above steps, it should be able to establish a strong and credible Green IT Services division. However, the speed and the success of the same depends on how the company leverages its current strengths and relationships through the process.

An IT organization that already has a strong customer base and strong processes should be able to enter the Green IT Services much faster. We will look at Infosys, an IT company to analyze this further.

**Case Study:**

Analysis of factors that will enable or hinder a typical IT services company in the green IT services sector. Infosys Technologies Ltd., a leading IT services provider has been used for this analysis in the paper.

**Is Infosys Ready?**

**Strengths –**

- Existing IT Consulting Practice
  - Infosys already has a well-established and renowned IT consulting practice wherein it partners with almost all the big names worldwide. A strong relationship and pre-established credibility will help Infosys enter into sustainability and Green It contracts with its clients.
• Partnerships with ERP & CRM product companies like Oracle and SAP
  o Infosys already has partnerships with ERP and CRM companies like Oracle and SAP and its workforce is aware and trained on almost all the new and old products of these companies. The sustainability service will serve as a complement to the ERP and CRM services.

• Industry domain knowledge –
  o Infosys’s existing in-depth knowledge of domain across industry sectors like retail, healthcare, insurance will give it an advantage and ability to apply the sustainability services in context of the domain.

• Sustainability Recognition -
  o There are 4 Indian companies from India (or with Indian origin) in the G1000 list. The 4 companies and their details are listed as under

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Sector</th>
<th>Rank and movement against last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infosys Technologies</td>
<td>IT Services</td>
<td>62(+58)</td>
</tr>
<tr>
<td>Tata Consultancy Services</td>
<td>IT Services</td>
<td>139(+27)</td>
</tr>
<tr>
<td>Vedanta Resources PLC</td>
<td>Metals &amp; Mining</td>
<td>376(+265)</td>
</tr>
<tr>
<td>ITC</td>
<td>Tobacco</td>
<td>670(+349)</td>
</tr>
</tbody>
</table>

  o While the representation of Indian companies in the overall 1000 companies is miniscule, the fact that leading Indian companies such as Infosys are being ranked within first 100 corporations across the globe and the pace rising in the ranks – especially on a difficult to define parameter such as ESG is really appreciable.7
  o With rising awareness of significance of ESG performance to the corporate brand equity and ultimately valuations will lead to dedication of more resources and gain in quality.

Infosys has been taking sustainability initiatives and publishing a sustainability report since 2008.

Infosys was also ranked in top 10 sustainability index by Dow Jones.¹

<table>
<thead>
<tr>
<th>Top 10 Companies By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
</tr>
<tr>
<td>NOK</td>
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<tr>
<td>JPM</td>
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<td>NOT</td>
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<td>STD</td>
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<td>NVO</td>
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<tr>
<td>SNY</td>
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<tr>
<td>DOW</td>
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<tr>
<td>INFY</td>
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</tbody>
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Weaknesses –

- Lack of partnership with a specialized energy and environment company
  - To establish itself as a leader in the sustainability consulting and green IT services area, Infosys needs to establish a partnership with a specialized energy and environment company so that it can hit the ground running and jumpstart in this sector by having ample resources and knowledge from day 1.

Opportunities -

- Eco Database sector
  - There is an opportunity to compete in the environmental database sector. Currently there are very few players like Trucost who are leading in this area. An IT company like Infosys can utilize its current knowledge.

database and data points collected from various sustainability projects to eventually create a benchmarking eco database.

**Threats**

- Other than the obvious threat of competition, the major threat in this sector will be ever-changing regulations. Drastic regulations and too many changes may phase out IT sector from being able to provide as much support as now.
- Compliance laws are very volatile and are country based, to stay abreast in this sector, constant learning is key.

**Limitations**

This paper has limitations to the analysis performed. The analysis points to various assumptions and areas for future research. Firstly, the paper assumes that sustainability services industry will continue to grow and that Green IT knowledge is easily acquirable. It would be interesting to analyze the variance and differences between a typical IT service and Green IT service project blueprint, governance model etc. Cross functional team and domain knowledge would be key to the success of any IT services company moving into the green IT sector, including for companies like Infosys etc. An analysis on how a company absorbs and seamlessly meshes its traditional IT strengths with Green IT opportunities can provide further insight.

**Conclusion**

For an IT services company to step into the Green IT services sector, there are a number of initiatives divided into incremental sets. Some companies like Infosys or Accenture have an added advantage as compared to others. The higher a company is in the evolutionary stage towards Green IT, the faster it can enter the market and the greater the market share it can obtain.