BASIS news & views

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A newsletter of the Bangladesh Software and IT Services Industry

Financing Issues of the Bangladesh Software & ITES Industry

Expectation & Reality

Bangladesh software industry is one of the fastest growing sectors in the country's economy right now. ICT as an industry in Bangladesh started its journey in early 80s. Through the passage of time, the major branches of ICT has taken their own identical stand. This writing will be focused towards financing issues of Software and ITES keeping aside the hardware and communication sector.

Currently there are more than 450 registered software companies in the country engaged in project based software development services, software product development and IT enabled services. There are approximately 5,000 technical professionals engaged in the industry. The size of the domestic market has been estimated to be more than Tk. 300 Crore in a year.

Despite a lot of limitations, Bangladesh Software and ITES sector has shown significant growth in export. In the year 2006, the total income from export of software was US$ 27.1 million. And this is 113% growth over the previous year. It is often found that the policy makers do feel that the figure 27.1 million is much less than what is expected from this sector. However, one needs to realize that the export earnings in software has 100% value addition. If you consider 25% value addition in Garment industry, this figure is equivalent to US$ 108.04 million and considering 50% value addition in pharmaceutical industry this figure is US$ 54.02 million which is close to three times of pharmaceutical expor earningst.

Inside this issue

There could be always gap a between expectation and reality. Similarly there should be some basis of expectation. Software is knowledge based business and deals with intangible values. Our expectation should rather be rational than wild. Let us see how there could be a rational expectation or how can we make our expectation rational. If we expect that we will earn US$ 1 billion from our ICT export it means we will need to produce our ICT products and services to a value of US$ 1 billion for which the international clients would pay. Now the question is how do we produce ICT products and services of that value? If we consider that we will markup 50% on the cost of production then to earn US$ 1 billion from export we need to spend US$ 500 million equivalent taka for producing the products and services. If we consider the quickest return on investment, in two years, then in first year we have to invest 500 million US$ and in the second year another 500 million US$. Rationally to expect an export earning of 1 billion US$ the investment arrangement has to be made accordingly.

What is the reality? Can we search our soul? Can we talk to our scheduled banks and ask how much money has been invested in this sector? It will be a real shame to spell out the figure. Probably you will find our export performance is beyond imagination if you had made rational expectation. Now the time has come to realize the difference between expectation and dream. Whatever performance has been achieved in export, is purely the contribution of private

Editorial Board

From Editor's Desk

Bangladesh software industry has enormous potentials. Despite, several limitations, it has been continuing to grow over the years. Moreover, the software industry has also been fetching foreign exchange for the country by exporting software. However, an important issue that impacts upon the growth of this industry is the problem with financing. While there is a high degree of expectation from this industry, unfortunately it has not been provided with the required financial backup. A lack of understanding about how a software business grows and functions has been one of the reasons why investors have shied away from this industry. Furthermore, due to high interest rate and other factors financing through banks has not been very successful. On the whole, the issue of software financing is a highly important one and needs immediate attention from the government as well as the financial sector. If these problems are not addressed with urgency, it could seriously impede further growth of this industry and create problems for software companies already in operation. An article in this issue clearly highlights the problems and suggests possible solutions.

It is a milestone for Bangladesh IT industry that a Japanese study finds our software sector as the most potential export sector of our country. The Study was conducted by JICA under export diversification project with Ministry of Commerce, Govt of Bangladesh and EPB.

Pyxisnet is setting a good example for other industry members. It is a joint venture between Datasoft and a Danish company called Groupone. The alliance was conceptualised during a visit by Groupone along with other Danish companies arranged by Denmark International Development Agency (DANIDA). The success of this venture clearly highlights the potential that Bangladesh has as an outsourcing destination. Moreover it is also a clear example of the support and cooperation extended by DANIDA in enhancing the growth of the Bangladeshi software industry. We laud this achievement and do hope that other companies will become similar success stories in the outsourcing arena. An article in this issue talk about the background and different success stories of Pyxisnet.

Another recent initiative assisting the growth of small and medium enterprises in the Bangladeshi software industry has been undertaken by Local Enterprise Investment Centre (LEIC), an organization set up through the partnership of Canadian International Development Agency (CIDA) and IDLC limited. LEIC has been set up to increase the competitiveness of SMEs and to assist their growth. A pilot project has been initiated to assist the growth of SME's in the software industry. Consultations were held with BASIS when this project was conceptualised. We welcome this new initiative and are highly optimistic that it will play an important and positive role in enhancing the growth of SME's and greatly contribute towards the overall competitiveness and growth of our software industry. An article in this issue focuses on LEIC.

T.I.M. Nurul Kabir
Editor, BASIS News & Views

Expectation & Reality

sector and reinvesting whatever small income they may have generated out of their passionate hard work.

The non-existence of financing for the Software sector has barred the natural growth of the industry, which in turn largely affected all cross sectors. If we ask why there is non-existence of finance in this sector, the simple answer we get is: financers do not understand this business type. If we analyze the nature of current lending practices we see that the banks look for projects which is ready to harvest opportunity. In other words, they will only come and invest when entrepreneur has prepared the bed in desert. Bankers want 100% secured and protected investment without taking any risk. They also expect high spread over cost. I would not be hesitant to comment that syndication behavior is prevalent with the pretext of open market economy.

Financing company feels that software industry is still not at the state of harvesting situation. And it is high risk business because of its high tech nature and innovative character. It is also difficult to value their work because of intangible nature of assets and it requires specialized expertise. Can any one really believe that these are all negative notations?

The software entrepreneurs are unable to access the traditional fund because it requires 100% collateral support and high interest rate. Even factoring account receivable is not accepted in case of software business. The big question lies that if 450 plus entrepreneurs with 5000 plus highly skilled technical workers can stake their careers, their future and burn their own money to bring 113% growth in export and circulate Taka 300 core in domestic economy, whereas policy makers, potential stakeholders will sit, watch and keep dreaming export figures will come from sky.

It is very important to know why and when a software business requires investment and what is the general financing life cycle?

A typical financing life cycle of Software Business.
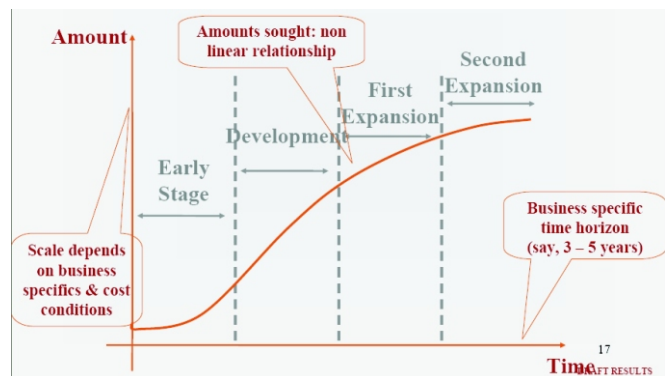
Understanding the software business model is very important. There are four stages in software business where one would require financing. The first stage is incubation stage. In this stage one needs fund to buy hardware,

develop human resource, develop prototype and develop the company's capacity to handle real life business solution. The second stage is revenue generation & reaching the break even point. At this stage the company has to take care of project expenditure, develop reusable modules, develop the team capacity and also spend on research and development. The third stage is Profit Making Period. During this period the company needs to invest in marketing, invest in implementation resources and on software maintenance and upgrade. The fourth stage is Company Expansion. Here investment is required for growth escalation and accessing new market areas. At present our industry is able to manage up to stage two in their own way, stage three and four remains completely un attended.

Let's look at the financing history of this industry. Business starts with Love Money as seed capital mostly from very close relative(s). Then financing comes from angel fund which is typically venture capital. Then it comes from revenue which meets the operational expenditure. Next is institutional finance to address the growth and market expansion. Finally financing from the capital market, which is long term investment for expansion.

If we sincerely want to improve the situation, primarily we all have to agree to identify and realize this as a serious problem. To overcome the gaps, the financial institutes have to understand the business model of software business. A serious shift of mindset is required. Instead of waiting for the harvest-ready situation, they have to invest to make it harvest-ready. A suitable financial product has to be developed with the understanding of software business process. Grant facility should be there for innovation and process maturity. Collateral free financing should be planned and credit limit by factoring receivables should be facilitated.

The government can immediately take some steps to address this dire issue. The EEF should immediately be separated from other industry. Create a collateral guarantee fund to support the collateral needs of traditional financing mode. Arrange credit limit by allowing factoring receivables.

Points to Ponder:
- [ ] Financial Institutes MUST understand the Software Business
- [ ] Financial Orgs must change the Traditional Lending Mindset
- [ ] Grant Facility for Innovation & Process Maturity.
- [ ] Plan Collateral free financing
- [ ] Allow Cash Credit on Work Order and Accounts Receivables
- [ ] Separate EEF for Software & ITES
- [ ] Collateral Gurantee Fund to support traditional lending laws

Let's see how collateral guarantee can help to improve the financing situation in software industry with current traditional financing options. A fund amounting Tk.10 crores can be marked as Collateral Guarantee fund. The software company will get a credit limit backed by the above mentioned collateral guarantee upon assigning the bill of a confirmed work. If we limit this amount to 10 lac maximum per company at any given point of time, we believe we can serve 200 small companies for their financing need. This guarantee fund will also earn interest of apporx. Tk.10 lac per month which will also work as cushion for any risk for company to performance. This will also minimize the risk of the Banker as expected in traditional financing.

If understanding is clear, intention is good, and the capability is evident; the result is ought to come.

By: Rafiqul Islam Rowly
Sr. Vice President, BASIS

Danish IT Association and BASIS Sign MOU

IT Branchen (ITB), the principal association of IT companies in Denmark and BASIS has signed a Memorandum of Understanding (MOU) for collaboration in activities and efforts towards advancement of the IT industries in both the countries. The MOU, signed on June 6, 2007, at Bangladesh China Friendship Conference Centre is planned to create better support for members of both Associations. ITB and BASIS will share information and work jointly in areas of common interests, facilitating events to benefit member companies of the organizations, for instance at BASIS Softexpo in Bangladesh and Tech Change in Denmark. The two Associations will also take initiatives for business to business match making among member companies between Denmark and Bangladesh to facilitate software outsourcing and joint ventures. HE Danish Ambassador Einar H. Jensen, EU Representative Jean-Claude Malongo, BASIS Ex presidents and a large number of BASIS members were present in this auspicious event.

IT-Branchen

Denmark - Bangladesh Joint Venture

Pyxisnet: A Success Story

The formation of Pyxisnet, an offshore Software development center, is a prime example of the new and exciting era the world of IT in Bangladesh is entering into. The initiation of this successful endeavor began when, as a part of DANIDA's Public Service Development Program (PSD), Groupcare, the leading supplier of web-based collaborative tools in Denmark, came to Bangladesh for a study visit. The overall objective of the DANIDA PSD Program (presently known as the Business to Business or B2B Program) is to contribute to the economic and social development of Bangladesh by attracting Danish technology and investment in the private sector. Because of the PSD program many Danish companies started to come into Bangladesh and Groupcare was one of them. Its objective was to evaluate the skill level and explore the possibilities for outsourcing of software development. Initially it met with fourteen local IT companies and later narrowed them to only three. One of the three companies was Datasoft.

Datasoft, a software company that offers software design, development, testing and implementation services, took up the challenge given by Groupcare of making a pilot project. The task was to develop a web-based application using ASP, .NET and C# within 6 weeks, using strict quality guidelines. After a careful evaluation Groupcare chose Datasoft as there was a good match between the two partners both at a managerial and technical level. All the three companies made tremendous effort to create and deliver the desired result but the dedication, resilience and commitment of the management and the technical capabilities of the employees of Datasoft set them apart from the rest. Also a good working relation was created in the pilot phase because of frequent communication and it strengthened the opportunity for future co-operation.

The successful initiation of this exciting new venture by Datasoft was greatly helped by Mr.Mahboob Zaman, Managing Director of Datasoft. The leadership of Mr. Zaman, a pioneer in the software development field, aided the successful completion of the project. Datasoft's success in the pilot phase also lies greatly with the presence of Ali Ishtiaq in its team. Mr. Ishtiaq, a Massachusetts Institute of Technology (MIT) Graduate, has been involved with the software industry in the United States for more than 20 years. He has worked around the world including in the Netherlands, Australia and Japan. After spending the last 4 years in the US directing engineering divisions in different US companies, he has returned to Bangladesh and now is the CEO & Managing Director of Pyxisnet.

After the pilot project, the companies decided to go for an outsourcing assignment spanning 14 months. They decided

From Left Ali Ishtiaq, Steen Alexandar, Erik Winther, Dil Afroz Begum, Jesper Jarlsback, Mahboob Zaman Photography By Jewel

that if the result became successful in terms of quality, delivery and features then they would go for joint-venture. Datasoft assembled a team of eight members and successfully did the assignment. After the decision was made to go for joint-venture a full fledged business plan was made and Pyxisnet started its journey. The name Pyxisnet is derived from the word 'pyxis' which means compass, it also is the name of a constellation; so in other words Pyxisnet is a compass aiming towards the stars and aims to reach unprecedented heights in its field.

Some of the successful projects that Pyxisnet has completed include GC.net. With GC.net solution companies are offered a web-based platform with a range of project rooms, where it is possible to collaborate with other people across geographical and organizational borders. Another successful project was Cellbazar, an electronic marketplace that can be accessed via mobile phones. Pyxisnet boasts an impressive list of clients that include Groupcare A/S, Eniro AB, Phonified LLC and Danish Pharmaceutical Society among others.

At present there are 46 software engineers working in Pyxisnet and by the end of this year this number is expected to rise to one hundred. The company believes that it can attract the huge market of Denmark as many Danish firms must outsource for various reasons. The choices Denmark faces when it comes to outsourcing are India, Vietnam and East European countries. But because of the expenses, language and culture barriers and unfavorable conditions in these countries, Bangladesh can be the most lucrative place for outsourcing to them. Pyxisnet has been set up to meet the needs and standards that international companies expect and it believes that with the knowledge, expertise and dedication of the members of Pyxisnet, it will attain unprecedented success in the world of IT in Bangladesh. ∎

Industry Initiative for Global Standard through CMMi

The economy of Bangladesh draws much of its strength from the private sector enterprises. But the growth of these private sector enterprises is impeded by many factors; lack of skills, technology, know-how and best practice required for sustained growth are some of the reasons. Local Enterprise Investment Center (LEIC) was formed to resolve these issues and for the accelerated development of our private sector enterprises.

LEIC is a pilot project funded by the Canadian Interna-tional Development Agency (CIDA) of the government of Canada and managed by IDLC of Bangladesh Ltd. The center is assisting our Small and Medium Enterprises (SMEs), to grow and enhance their competitiveness through formation of joint venture or other forms of long term partnership. The Software development sector of our country has the ability to deliver a lot. With proper guidance and intense hard work, it can do wonders for our economy. LEIC, with the intention of taking the private sector enterprises into a new height found this sector very potential and wanted to make a difference.

'Technology', 'People' and 'Process' are the three main factors when it comes to software development. Many people in the business are still not aware of the importance of 'Process'. LEIC observed, after consultation with BASIS members and other industry-insiders, that through 'process improvement' a dynamic change can be brought in the software development sector - in terms of cost reduction, better schedule adherence, higher productivity, better product quality and higher customer satisfaction. It

Typical Roadmap for Implementation

identified Capability Maturity Model® Integration (CMMi) as an effective approach for such process improvement.

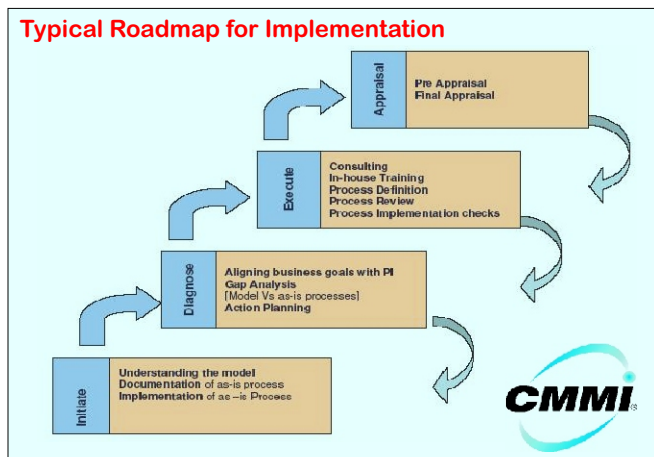CMMi, administered by the Software Engineering Institute of Carnegie Mellon University, USA provides organizations with the essential elements of effective processes. CMMi helps integrate traditionally separate organizational functions, set process improvement goals and priorities, provide guidance for quality processes, and provide a point of reference for appraising current processes. The organizations will be able to more explicitly link management and engineering activities to their business objectives. They can expand the scope of and visibility into

the product lifecycle and engineering activities to ensure that the product or service meets customer satisfaction. They can also incorporate lessons learned from additional areas of best practice (e.g., measurement, risk management and supplier management). There are five stages in the CMMi model; these are Maturity Level (ML) 1 to 5.

After a successful negotiation process, QAI (India) Ltd., Asia's largest consulting company for software process improvement were appointed as Consultant to implement CMMi at maturity level 3. The selected five participating local software companies in the consortium project are Datasoft Systems Bangladesh Ltd., IBCS-Primax Software (BD) Ltd., Leadsoft Bangladesh Ltd., Southtech Ltd. and Spectrum Engineering Consortium Ltd. On April 22, 2007. An agreement was signed among the concerned parties and the completion of this program is expected to be, approximately, within the next 18 months.

Although the primary objective is to enhance the competitiveness of the selected software companies, this program will have a broader impact by demonstrating, to the members of the local software industry, the long-term benefits of having robust processes. The global competitiveness of Bangladesh software industry will reach new heights after the completion of this program.

This is a consortium project of LEIC contributed by CIDA and managed by IDLC

European Union Supported
Information Technology Management Programme Launched

The Bangladesh Information Technology Management Programme (BITMAP) is a pilot project sponsored by the European Commission's Asia-Invest II programme. The programme is implemented in Bangladesh with Bangladesh Association of Software & Information Services (BASIS) as the beneficiary and managed and run by the Danish Federation of SME together with T&E Centre (Finland) and Greater Manchester Chamber of Commerce (UK). BITMAP has two components such as the institutional capacity building of BASIS and the implementation of a pilot training programme for ICT sector companies in Bangladesh.

During 2007 and 2008 the programme is going to train 9 consultants and 15 export employees in management and export development. The purpose is to create a hard-core group of management ICT consultants with the ability to further train consultants and businesses at the local level. The selected companies are involved in the programme to kick start the process. Both company employees and consultants are selected by a team of foreign experts. The topics range from basic identification of market information, company SWOT analyses, to more complicated legal and technical aspects. The training is a mixture of classroom and practical assignments. The teaching methodology will be based on applying the theory in practice, learning from experience of colleagues in the business and related to the salient features of the global ICT environment.

The objective of the training programme is to equip professionals with export skills to improve their personal competences and provide companies with competitiveness in international markets with a focus on EUROPE.

Training Calendar of BITMAP

Module 1-2	3-7 Jun 2007	Steffen Thomsen, Henriette Freris, Henrik Egede
Module 3-4	1-5 Jul 2007	Steffen Thomsen, Tony Brown
Module 5-6	26-30 Aug 2007	Tony Brown, Finn Kongstad
Module 7-8	23-27 Sep 2007	Turka Ristimaki, Simon Poulsen, Henriette Freris

The first two modules of BITMAP training were conducted successfully during June 3 to 7, 2007 at the BETS Centre Training Hall, a training centre in the Dhaka city.

The trainers in the first session of the BITMAP training are:

Henrik Egede: born 1959, is a Vice President at ITB, Denmark's IT Industry Association. Before joining ITB in 2000, Henrik was one of the founders of the Danish Ministry of Science and Technology. Via key positions at IBM and Nordic Council, Henrik made his way into the networking centre of the Danish IT industry. Henrik Egede holds an M. A. of communication and literature. Henrik Egede has a firm belief that networking leads to business.

Steffen Thomsen: holds a Masters in International Economics and Business Administration. His primary work areas in International Department include: Project Manager for activities under Danida's B2B Programme, B2B country responsibility for Bolivia and Nicaraqua and responsible for the Export Promotion & Education Programme (EXPEP), activities in Latin America, development of feasibility studies and TechChange Furniture.

Henriette Kahre Freris: the Project Manager for BITMAP and is a Chief Consultant with DFSME is involved in most of the activities of the project. H.K.Freris is Chief Consultant with DFSME and has among other functions been working as port folio manager since 1999 for activities in Bangladesh including a large number of joint venture projects for example: Aftab IT, ADCOMM and TechnoVista in addition to being facilitator of two Danish IT delegations to Bangladesh. Henriette Freris has an M.B.A.

Participants of BITMAP

Japanese Study Finds
Software: the most Potential Export Sector in Bangladesh

A recent study by a Japanese team of experts concluded that software is a most potential export sector in Bangladesh. Japan International Cooperation Agency (JICA), upon request from the Government of the People's Republic of Bangladesh has conducted a study on "Potential Sub-sector Growth for Export Diversification in Bangladesh" through assistance from Export Promotion Bureau (EPB). As part of the study, the JICA team primarily made a groundwork selection of six sub-sectors such as Food Processing, Jute Products, Pharmaceutical Products, Computer Software, Light Engineering (metalworking and machining) and Electric & Electronic Products.

The JICA team underwent threadbare discussions with all stakeholders involved in the six sub-sectors and organized a day-long workshop which resulted in the final selection of Software as a most potential sub-sector for the study. BASIS supported the JICA team with all information on the status of software and ITES industry of the country and played an important role in identifying the software sector as a product for export diversification. Later, on June 25, 2007, EPB organized a day-long strategy workshop titled "Problem Analysis and Pilot Project Formulation for Computer Software: Most Potential Sub-sector for Diversification of Bangladesh Export". The objectives of the pilot project are to enhance export competitiveness of software products in the international markets in particular and diversification of Bangladesh export in general, which would be attained through the implementation of specific action and master plans. The pilot project will involve a certain number of companies of the software sector as the first beneficiary.

The six member JICA team involved in this study consists of Mr. Shozo Inakazu (Team Leader), Mr. Yasuo Takeuchi, Mr. Yuji Kurokawa, Mr. Nobushige Fukase, Mr. Naoya Nishigaki and Mr. Keisuke Sugiyama.

Stakeholders of the Program:

Ministry of Commerce · JICA · Export Promotion Bureau · BASIS

Industry Academy Joint Initiative for HR Development in Software Industry

Discussion session held on Proposed Professional Skill Development Council (PSDC). With the aim of preparing the software graduates of different Universities and institutes 'industry ready', BASIS has been working closely with academic community to develop specific programs. As a part of this, BASIS has organized a discussion session on 19 May, 2007. The session was participated by a large number of representatives from leading Universities in the country and software industry representatives.

During the meeting, the proposed concept on Professional Skill Development Council (PSDC) was introduced by BASIS. The meeting was informed that the proposed council would develop a common framework for assessment of skills of software professionals. The proposed council, with the help of different Universities, is also expected to carry out targeted skill development program for the fresh graduates in line with real life job needs in the software industry.

From the academic side, the discussion meeting was attended, among others, by Dr. Lutfor Kabir, Director, IICT of BUET, Prof Dr. Chowdhury Mofizur Rahman, Pro VC of United International University, Dr. Abul L. Haque, Head of CS Dept. of NSU, Dr. M Abdul Awal of NSU, Dr. Mumit Khan of Brac University, Professor Dr.Mohammad Zahidur Rahman of Jahangeer Nagar University, Dr. M M A Hashem, Head of CS in Khulna University of Engineering and Technology (KUET), Dr. Rokunuzzaman of Independent University, Mr.Syed Akhter Hossain, Head of CS department, East West University.

From the software industry, the meeting was represented by BASIS EC members, chairpersons of different standing committees and members of BASIS standing committee on HR Development and Policy attended the meeting. Mr. Sarwar Alam, President BASIS, presided the meeting.

IT Employment Trends

During June 2006 to May 2007 a total of 1839 IT related jobs were advertised in newspapers and major internet job sites. This is about 7% more than the 1715 jobs advertised during the previous one year period (June 05 May 06).

No. of ICT Job Vacancy Announcements
(job announcements in major dailies & job sites)
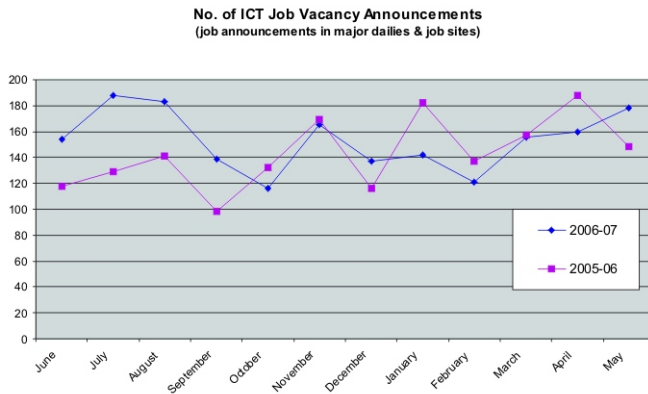
Source: bdjobs.com

Tenders Floated in the IT Industry

During May 2007 a total of 263 IT related tenders were floated in our country in the Government, Public and Private sectors. Following is an item wise list of these tenders:

Category	Sub-category	No. of Tenders
Computer Related	Data Entry and Related	0
	Hardware/Accessories	182
	ICT Support/Consultancy	0
	Internet	01
	Networking	06
	Maintenance/Servicing	01
	Projector/Multimedia projector	26
	Software Development	06
	Software Supply	10
	Training	03
	UPS/IPS/Stabilizer/Converter	21
	Website Development	01
Sales	Computer Related	01
Expression of Internet	Data Entry & Other IT Services	04
	Hardware/Vendor Software	01
Total		263

Source: Alltender.com

Software Export Continues to Grow

During the first eight months of 2006-07 financial year software export amounted to US$ 19.71 million, which is 26% higher than export during the same period in previous financial year (2005-06).

Software & ITES Export

	Export in Million US$	Increase
July 05 – Feb 06	15.17	26%
July 06 – Feb 07	19.71	

Source: EPB, Bangladesh

New Members

Following companies became BASIS members during May 2007

Pyxisnet Limited	www.pyxisnet.com
Nilavo Technologies Limited	www.nilavo.com
Dream Door Soft	www.dreamdoorsoft.com
KAZ Software Limited	www.kaz.com.bd
Vision IT Limited	www.visionitltd.com
BigmasTech Communication Limited	www.voipdeal.com
Sigma Technologies Limited	www.sigmatech.com.bd
20-20 Technologies BD Limited	www.2020technologies.com
Info_Bit (Pvt) Limited	www.infobit-bd.com

Total members as of June 2007 is 245