Bangladesh Software and IT Service Industry
Recent Trends & Dynamics

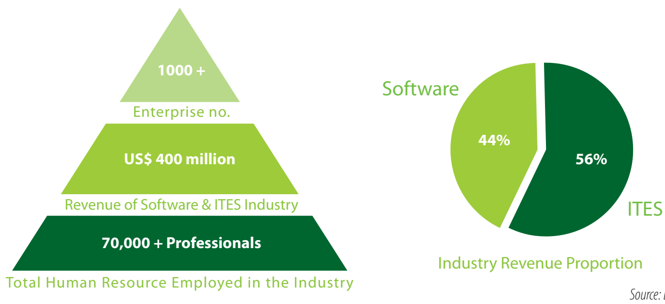
Software and IT service industry in Bangladesh has crossed a long road over the last few decades. It has matured. The industry no more remains at the sideline. It joined the mainstream. Not only the industry is contributing significantly in the national income, but also it has been playing very crucial role in creating high quality employment for a sizable portion of young graduates of the country.

The presence of high number of young entrepreneurs is one of the distinctive features of this industry. In last decade many tech savvy young graduates, some of them returning from abroad after finishing education, have started their IT ventures. Despite various local and global challenges, these young spirited entrepreneurs have done remarkably well in building sustainable business organizations through their hard work and passion. Surely, the enthusiasm and resilience of the young entrepreneurs are the main driving force of Bangladesh IT industry.

Snapshot of the Industry: Size, Composition and Market

According to BASIS survey, there are over 800 registered software and ITES (IT Enabled Service) companies in Bangladesh. There are another few hundred of unregistered small and home-based software and IT ventures doing business for both local and international markets.

Chart 1 Bangladesh Software and ITES Industry



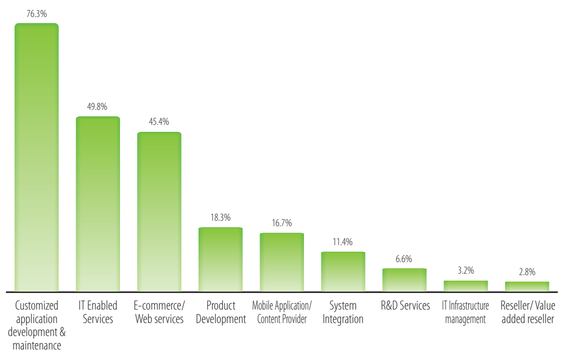
Source: BASIS survey

The total industry size is estimated to be around US$ 400 million. Approximately 70,000 professionals, majority IT and other graduates, are employed in the industry. Though, compared to other traditional mainstream industry, the contribution for overall employment creation is not significantly high, but if considered in terms of creating high quality employment (average monthly compensation over Tk. 15,000 per month), software and IT service industry is surely one of the top graduate employment sectors in the country.

BASIS recently carried out a survey on three hundred of its member companies. Analysis has been done on business nature, business volume and size of companies. Over 70% of the companies (please see chart 2 next page) are found to be involved in development and maintenance of software for their clients. A number of those are simultanously engaged in providing different IT enabled services for their clients as well. In total, almost half of the surveyed companies are involved in providing range of IT enabled services (data/form processing, graphic/web design, content management etc.).

Interestingly, a significant number of companies (18%) have developed software products or productized services; most of those have been developed over time after repeated installations for multiple clients. A number of companies are in digital content development and delivery business , mainly providing content services through mobile platform.

Chart 2 **Business Specilization of BASIS Member Companies**

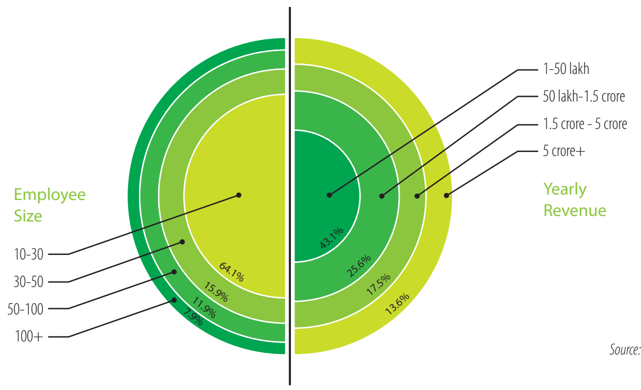


Source: BASIS survey

One of the most encouraging recent trends in the industry is that, leveraging on recent positive changes like larger Internet user-base, better connectivity as well as introduction of new payment methods (online payment – through credit card and mobile payment), a good number of companies (around 45%; some dedicatedly and some along with their core software or IT service business) are focusing or diversifying on different web based services that include specialized portals, listing services, e-Commerce, e-Learning, payment intermediary services etc. A number of these ventures have done quite well in terms of popularity as well as financial viability. Off late, some companies are also developing web applications based on cloud/SaaS delivery model. These emerging new business and service delivery models might define the new wave in the coming years for Bangladesh IT industry.

With regard to average size of enterprises within the industry, it is interesting to note that, the distribution is quite spread with respect to both revenue size and employment number. Majority of the companies are in the range between 10 to 50 people in employee size. Similar pattern can be found in revenue size of the companies. However, there are few product companies who have relatively less number of people for significant revenue.

Chart 3 **Enterprise Size Distribution (Revenue and Employee Size)**



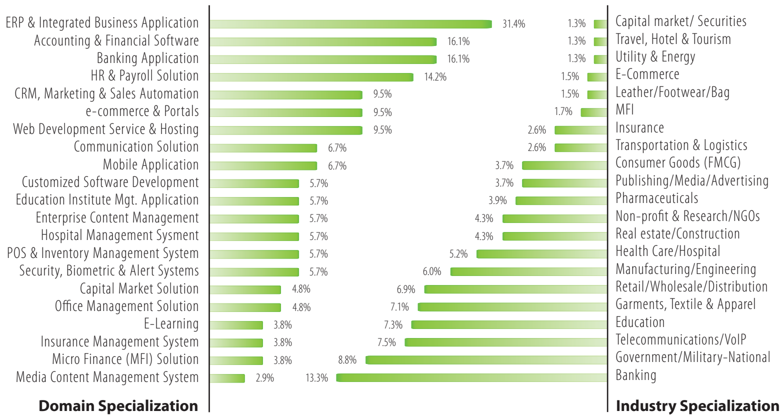
Source: BASIS survey

Domestic Market: Private Sector Demand Still Propelling Growth

Local market still constitutes the major part of business of the software and IT service industry (63% of BASIS member companies are focused only in local market). There has been a consistent growth (around 20-30%) in this market over last few years. The trend also shows that the market is maturing in terms of both client requirement and solution response from IT companies.

Chart 4 **Domain (Functional) and Industry Specialization of Software Companies**

(Amounts refer to percentage of surveyed companies specialized in respective categories)



Source: BASIS survey

Although there is high level of interest for IT jobs in public sector, market share is still dominated by private sector. From a survey carried out on 110 IT solution companies who are focused mainly in domestic market, it is found that a large part of them provide business application solutions including ERP, Accounting software, HR software, Sales Automation, Inventory Management system etc. to private sector business enterprises.

Banking and other financial sectors (including capital market, Insurance, Leasing, MFIs) still continue to be the major focus for a large portion of IT companies. In the banking sector, the core banking software market is dominated by foreign software (though in a number of cases local solution companies are working for implementation and maintenance for those softwares). However, interestingly a good number of local IT solution providers are working with banks for providing range of ancillary services related to banking. Because of the increased activities in Bangladesh capital market during recent years, a number of companies have developed solutions for merchant banks, brokerage house and issue managers. As regulation in the micro credit/micro finance institutions (MFI) are getting more stringent and more pressure is on for operational efficiency, a number of MFI solution development companies are targeting this otherwise untapped market.

Manufacturing sectors including RMG, textile, pharmaceuticals and other consumer goods industries have created sustainable demand for IT solutions like ERP, HR information system, production and financial management solution. On the other hand, service industries like telecom (second highest after financial sector within service sector), retail & wholesale, healthcare (hospitals, diagnostic centers etc.), education (University, schools and colleges), publishing/media and real state have created sizable market space for IT solution companies.

A good number of software and IT service companies who provide non-specialized/non-focused services are surviving on business demand generated across different client industries. Examples of such general IT solutions are accounting solution, web site development, CRM, sales automation, office management, security solutions etc.

The local software industry has been trying to keep pace with the most recent development going on across technology and communication space. A number of companies are developing apps for mobile and other hand-held devises. Some companies are also providing services (platform or content service) in the new business models like pay per use, primarily using the mobile distribution channel.

Government Market: A significant number of software and IT service enterprises (mainly the larger and more established IT companies) have developed expertise targeting the government/public sector market. Though the expectation was quite high because of the new government's vision towards Digital Bangladesh, the government market did not demonstrate any significant uptrend in procurement budget or spending throughout 2009 and 2010 (with some exception in higher procurement for IT infrastructure). However, according to industry players, from early 2011 things have started to change to some degree and in last few months there are some noticeable upward swings in procurement trends for software and other IT services by different ministries and departments of the Government. Hopefully this trend will be consistent for some time in the future to generate sustainable business for local software companies focused in this market.

Export Market: New Optimism

It is a fact that despite high expectation, over last decade the software and IT service industry could not perform according to its potential in the export front. The export value* is still meager compared to other outsourcing countries in the region. As reasons behind this lackluster performance, industry experts have identified a number of problems including lack of proper infrastructure, shortage of qualified IT resources, absence of international branding & marketing activities etc. However, in 2010 and 2011 there have been a number of achievements that have made the industry upbeat about the export trends in coming years.

Table 1 **Export Trends in Recent Years**

Fiscal year	Export *(in million USD)*	Growth *(over last year)*
2006-07	26.08	-3.44%
2007-08	24.09	-4.83%
2008-09	32.91	32.59%
2009-10	35.36	7.44%
2010-11	45.31	28.14%
2011-12	70.81	56.28%
2012-13	101.63	43.53%

Source: EBP

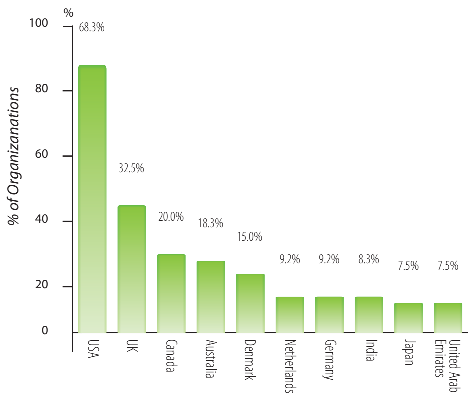
In December 2010, Gartner, one of the most respected global consulting groups, has published a list of top 30 outsourcing destinations of the world (this list is published every two years by Gatner). The list included Bangladesh for the first time. This recognition is certainly going to positively influence perception of prospective overseas clients on the capability of Bangladesh IT industry. And already there have been signs that global companies have started to seriously consider Bangladesh as their outsourcing or back-office location. In late 2010, Samsung, the global leader in consumer electronics industry, has

** Official export statistics is considered to be less than actual export because of existing problem with reporting procedure of export data by commercial banks* opened up its high-end R&D (research and development) centre in Bangladesh with over two hundred engineers (it is the 18th R&D centre for Samsung. Beside Bangladesh, Samsung has R&D centres only in India within South and South East Asia). Apart from Samsung, there are few other global IT companies (e.g. AMD, LG and IBM) who are currently in the process of setting up their back-office R&D or support centres in Bangladesh. Currently there are at least 10 small to mid sized offshore development or back office service centres (established in last 3-4 years) operating from Bangladesh. Apart from those, at least 30 joint-ventures have been set-up in Dhaka during last few years and these are providing offshore services to clients in North America, Europe and Far East.

Apart from the formal corporate outsourcing/off-shoring initiatives, during last couple of years there has been a new trend of individual/group based outsourcing (alternatively called as freelancing). These are informal initiatives taken by young IT professionals/entrepreneurs (some of them still students) who are acquiring clients through various online marketing channels that include online market-place for freelancers (e.g. vworker, freelancer, odesk etc.), SEO, social marketing etc. Typically in such cases the overseas clients and also their jobs are small in size. Various types of jobs are outsourced. These include software, web design, mobile application, graphic design, search engine optimization, social media marketing, data processing etc. Although these informal initiatives by freelancers are small individually, their aggregated contribution in employment generation and export earnings are not insignificant. Proper estimation is not possible as their income often is not recorded officially as earning from IT service export. Industry experts feel that if properly supported and guided (in areas like business development, investment planning and organizational capability growing), this new class of entrepreneurs would definitely contribute more to the industry.

Chart 5 **Top Export Destinations**

(Amounts refer to percentage of surveyed companies having export in respective countries)



Source: BASIS survey

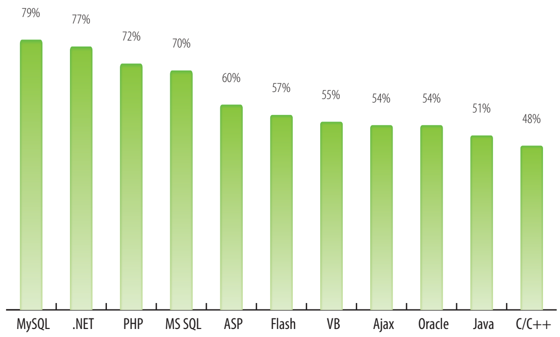
According to BASIS survey, there are over 160 BASIS member companies who have export in their portfolio. Around one third of those companies are 100% export based. In terms of export destinations, North America (mainly USA; a major part of business in US market is still done through NRB linkage) still dominates, while in Europe countries like UK, Denmark and Netherlands have emerged as major destinations during last few years. A number of companies regularly export in Australia though the growth is limited by the number of NRB entrepreneurs located in that market. Japan, which is very sensitive to language skill, has been an important market for a while. However, in recent years much success has not been acheived in further penetration to this market.

Off late, a number of companies (mainly in mobile related application and communication) have got considerable success in some Asian and African markets including Malaysia, Singapore, UEA, Saudi Arabia and South Africa where the sizable Bangladeshi expatriate communities has played important role in creating attractive market demand for communication based IT service (e.g. mobile Value added content service, VOIP dialer etc.). One of the most remarkable successes in recent times is to be able to penetrate (though in limited scale and for some niche product markets) to highly competitive Indian market. This surely demonstrates increasing maturity of Bangladesh industry in developing products or services with international standard.

Technical Skill Matrix of the Industry

The BASIS survey indicates that the majority of the software companies have taken a strategy to maintain flexible technology skill portfolio that includes both open source as well as proprietary technology platforms. . Microsoft clearly dominates in latter category. Though web application is still the predominant technological focus area for most of the companies, a number of companies have built technical expertise for core technologies (e.g. C, C++) for some advanced development works including embedded solution or game development. Very recently, anticipating the new wave of mobile centric global IT demand pattern, a number of companies have already started building skill base mobile platforms like Android, iOS, J2ME and QT.

Chart 6 Technical Expertise of Software Companies



Source: BASIS survey

Industry experts feel that, for the software companies there will be regular need of upgrading the skill sets, particularly in this decade where some revolutionary trends (e.g. Cloud computing) will probably fundamentally redefine the technology market place, probably immediately in outsourcing market , but gradually in local market as well.