JOHNSON
Cornell University

December 3, 2012

# AuthBridge Research Services: Innovating HR Operations in India

Vishal Gaur*

*"AuthBridge Research Services is India's leading background screening and risk management consultancy. Our experienced personnel, backed up by the latest technology and tools enable our clients to reduce employee, vendor and business partner related risks."*

--- Company website

Ajay Trehan, the Founder-CEO of AuthBridge Research Services, was contemplating the future prospects of his young company. It was a hot day in July 2011, the thermometer showing 42 Celsius. Yet, the streets were packed with cars, new buildings were rising nearby jostling with each other for a piece of the sky, and the façade of this once sleepy town was changing rapidly. "The last few years have been crazy. Our main challenge was figuring out how to make the business scalable and financially viable. Now we have achieved these goals. Our processes run on auto pilot. Managers are well trained, and know how to solve problems. I am spending this year on the road, meeting clients, and expanding our business into new directions." Trehan said excitedly.

**Background**

AuthBridge was founded by Trehan in 2005 as one of the pioneer firms providing employee risk management and human resource management solutions for corporate customers in India. The need for such services had originated in India due to the growth of the Business Process Outsourcing (BPO) industry. BPO involved the outsourcing of business operations and responsibility for specific functions or processes to third-party service providers. This industry was started by Fortune 500 companies looking to lower their costs by establishing operations in India. While the initial BPO firms were wholly-owned subsidiaries of Fortune 500 parent firms, considerable growth took place after the entry of third-party service providers. In 2005, BPO was a multi-billion dollar industry (see details in **Exhibit 1**).

Typical customers of BPO service providers included banking and financial institutions requiring quantitative analysis of data, taxation advisory firms, medical record management firms, and many others. Many of these firms handled personal or confidential data. Security, trust, and verifiable processes were essential to their operations. According to Trehan, "More than 90 per cent of Fortune 500 companies have a formal policy of screening the backgrounds of their employees as well as their outsourced staff." Thus, the concept of background screening took root. It was facilitated by the National Association of Software and Services Companies (NASSCOM), a trade association of Indian Information Technology (IT) and BPO industry, which set up an information repository in 2005, called the National Skills Registry, for collecting information about each IT professional along with background verification reports.

*Vishal Gaur is Professor of Operations Management at the Johnson School at Cornell University. E-mail: vg77@cornell.edu.

Trehan, an engineer from the famous Indian Institute of Technology, Delhi, was one of the first entrepreneurs to spot the need for this service in India. Starting with a skeletal staff of 5 employees and a 1,400 sq ft office space, AuthBridge acquired its first client, a real estate major, with an order for 2 verification cases. This was soon followed by an order from a top ten BPO company. AuthBridge ended its first year with 3 clients and a volume of 20 cases per month. It grew rapidly over the next five years to a client base of 150 and a volume of 10,000 cases per month. Headcount increased from 5 to 200 employees, located in two buildings in Gurgaon.

AuthBridge's staple business consisted of background verification of new employees for its clients. The Human Resources department of a client company sent bio-data and supporting documents of employees to AuthBridge with a request for verifying educational background, previous employment, addresses, and sometimes, criminal record and character references. Each such request was called a *case*, and each piece of information to be verified was called a *check* or a *verification*. A client usually sent a batch of many cases at a time. Each case consisted of a minimum of two checks: a reference check and an employment check.

AuthBridge contacted the colleges and universities listed in the bio-data to verify education, called past employers to verify employment records, and worked with the administration in different parts of the country for checking addresses and criminal records. After the verifications were completed, AuthBridge wrote a report to the client for each case. The report listed what checks were verified, how they were verified, what checks could not be verified ("Unable to Verify" or UTV), and why. The report was in a format or template required by the client. AuthBridge received compensation from the client upon the submission of the report. Sometimes, and with some clients, UTV cases led to prolonged negotiations on payment.

The initial operation at AuthBridge was completely manual. An employee would work on a case from start to finish, conducting all of the background checks. She would keep track of the status of each check for each case. On any given day, she would be working in parallel on 10-15 cases in different stages of completion, and would have to decide which verification to work on next. This process was inefficient and expensive. Each case took 5-16 days to go from initiation to completion depending on the number of verifications required and the difficulty of the case. Since a lot of this time was spent waiting for responses and conducting follow ups, one employee could complete about 60-100 cases per month. Productivity varied widely across employees.

According to Preeta Pradhan, Vice President of Compliance and Marketing,

> While there was a great need for this service, the infrastructure did not exist to fulfill it efficiently. Each verification required multiple contacts to initiate enquiries and follow up. Universities and employers often did not have integrated databases or designated personnel to whom queries could be addressed. Moreover, a verification request frequently did not result in a clear yes or no answer. Instead, documents could be incomplete, names could be misspelt, or there could be discrepancies. Verification was a function of persistence, experience, and efforts to complete the 'check' within a short time-window to minimize risk when a new employee started work.

Initially, workers used to keep track of the status of each case using a Top Sheet (see **Exhibit 2**) similar to a work order in the manufacturing industry. As business grew, new employees were added, and the number of cases per employee also increased. AuthBridge sought to improve the productivity of workers by designing an Excel spreadsheet for each worker, which the worker could use to track the progress of all the cases she was handling.

In spite of these changes, the task of a verifier remained unstructured. Each case had its own story, which could not be codified into a database. The verifier had to keep track of these stories, and decide which cases to push. For example, on a given day, a verifier may have 50 open cases, of which 10 may have been completed, and the remaining may be in various stages of follow up for confirmation or request for new information. It was difficult to ensure quality and productivity because the performance of verifiers was not readily visible. Quality was a function of each individual's expertise and integrity.

Over time, AuthBridge identified many factors that were relevant in deciding which cases to push first. These included the priority of the client, the due date of a case, the status of other checks in a case because a case could not be completed until all the checks were done, and the status of other cases in that batch because the case could not be submitted for payment to the client until the completion of the entire batch. Keeping track of all these variables required a high level of cognitive ability and on-the-job training. Sometimes a case would get delayed a long time due to one pending check or scenario. Managers would never have clean performance measures of the process for analysis. Moreover, there were no transparent standards to determine how much effort to put into a verification before it could be closed as UTV for a client. Thus, the process was prone to delays, deviations or failures. As a result, productivity was low, costs were high, quality was difficult to communicate, and as business grew, it was expensive to increase capacity.

Trehan decided to adopt a workflow solution to the problems faced by AuthBridge. "Automation was the only way to take things forward," he said. The challenge here was that while the solution was to be workflow driven, it also had to have the flexibility to be customized given the nature and dynamism of the processes. Pradhan described the problem thus: "Off the shelf solutions were not tailored to our requirements and did not hold the promise of scalability and customization of processes. ERP solutions like SAP were too expensive an option and hence unviable. The only solution was to build in stages and customize." AuthBridge commissioned a software engineer to begin creating BRIDGE, a homegrown workflow solution for background screening. BRIDGE was commissioned in April 2010 after two years of work. Migration to BRIDGE threw up its own challenges because processes on the floor and processes as documented did not match. Migration was done in phases, and total migration was completed by October 2010. **Exhibit 3** shows the stages in the implementation of BRIDGE, and **Exhibit 4** shows the changes in productivity in AuthBridge's operations from 2006 to 2011.

**Workflow under BRIDGE**

In 2011, AuthBridge's process is designed with functional specialization. Information flows across functions through BRIDGE. The process starts when a case is received from a client. The case contains the resumé and copies of supporting documents such as degree certificates, proof of address, and past employment records of an individual. It may be electronic or paper-based. Some clients provide supporting documents, whereas others ask AuthBridge to obtain them from the employee.

The case is first seen by the Pre-Verification Department. One employee scans all the documents with a total capacity of 160 cases per day. The scanned documents are sent to one of 8 Highlighters. A highlighter is an experienced employee who knows what fields in the documents are required for various checks and must be codified into AuthBridge's database. She tags or highlights these fields in the documents. Fields may include names of schools, colleges and universities where the individual studied, her enrolment numbers at these institutions, addresses, contact information of previous employers, etc. "A case may give an individual's name in different ways on different documents. The highlighter has to decide which name to use for verification." says Pradhan. A highlighter can process 40 cases per day.

After highlighting, the tagged information is entered into BRIDGE by one of 9 Data Entry Operators, thus creating an electronic record of the individual. Each data entry operator can process 30 cases per day. Sometimes information is incomplete, which may require the data-entry operator to refer back to the worker who tagged the information or, if documents are incomplete, back to the customer with a request for additional documents. If a case has been handled before by AuthBridge, such as for a previous employer, the system displays potential matches to the data entry operator, who then verifies if the case is identical. A disciplined data entry operator would compare the cases carefully, otherwise she would override the system and create a new, possibly duplicate, record.

After Pre-Verification, cases are sent to the Verification Department, which performs the main function of conducting various checks. This department is divided into two parts, an employment team to conduct employment verification, and a vendor management team to manage all of the other checks, including education, police verification, and address verification, which are outsourced to third party service providers throughout the country.

The employment verification process illustrates how AuthBridge has standardized itself. Each case is serviced by the Research team (4 workers), the Initiation team (4 workers), and the Verification team (14 workers), in that sequence. The Research team populates BRIDGE with data regarding the organizations listed in the previous employment record in a case. It checks if an organization already has an entry. In about 50% of the cases, no entry is found. The Research team finds out whom to contact in that organization and creates an entry for it. One worker can research 35 organizations in a day. After research, the case is assigned to one worker in the initiation team. This worker sends verification requests to all organizations listed in the case by phone or email, and obtains confirmation that verification has been initiated. A worker in this team can process 40 cases per day. Then, the Verification team follows up on the initiated cases. The yield rate of workers in this team is the most subject to uncertainty. A worker works on about 60 cases in a day, which could be at different stages of follow up. The worker is expected to complete 15-20 of them.

Finally, the case is sent to one of nine Process Specialists. A process specialist inspects if all checks in a case have been completed to the required standard. Then, the process specialist creates the report to be sent to the client. Each process specialist can handle 40-60 reports per day.

Pradhan identified a number of process improvements that were facilitated by BRIDGE:

> The employee verification could be seamlessly divided into research, initiation and verification. We created a system to classify cases into various stages of checks. F1, F2, F3, F4 and F5 indicated the number of follow ups done with HR, and RM1, RM2, RM3 indicated follow-ups with Reporting Manager. Client service level agreements (SLA) were specified based on number of follow-ups that would be done and with whom, so that service level was properly defined. For example, a client SLA would say that a case could be closed as UTV after three follow ups. Moreover, we created separate queues for each stage. Verifiers were given cases according to the earliest due date, and were asked to work on those cases first that were the closest to completion. This enabled us to improve prioritization and control tardiness. Workload for an initiator or a verifier was managed depending on capability and requirement.
>
> The process specialist function also underwent a major change in working style. Earlier, a process specialist had to assimilate data from many places to write a report. This was time consuming. A process specialist would struggle to complete 25 reports in an 8-hour work shift. Scalability was limited because this function required the highest level of training and skill. Moreover, errors would be found too late, resulting in delayed completion of reports. After BRIDGE, report templates were standardized and pre-selected, data was pre-fed, and the language of the disposition of each case was pre-decided. With these taken care of, the process specialist could concentrate on validating that verification was done in a manner compliant with the internal process and the service level agreement with the client. Today, each process specialist is able to check 35-40 reports. With further automation, we expect that process specialists will only need to conduct check samples to ensure quality.
>
> Clients are now categorized into RED and GREEN on the basis of whether they agree to allow us to process a case which has an insufficiency. An insufficiency arises when we are waiting on more information from a client to complete a check. Earlier, there were many instances when a client would refuse to accept a report if there was even one insufficiency and all other checks were completed. This would happen even though the insufficiency was caused by a delay at the client. We now categorize such clients as RED. We have configured BRIDGE to allow us to halt the processing of a case for such clients after an insufficiency has been raised. This allows the teams to focus on work that would be dispatched to clients as soon as completed. GREEN clients accept our standards, so there is no halt for GREEN clients. Their cases are completed and dispatched with the final status as Insufficient if the insufficiency is not fulfilled till the due date. We have built these expectations into the client SLA, and have been able to convert clients from RED to GREEN.

**Exhibits 5, 6 and 7** trace the changes in the process at AuthBridge from the first stage until after the implementation of BRIDGE.

**Future Growth**

Trehan described the competitive environment and his planned initiatives [see **Exhibit 8**]:

> As the BPO industry boomed, so did background screening. Initially, the larger players were those who had been operational in the global market and had newly entered India. These included First Advantage, Kroll and KPMG. Today, there are many companies offering verification services as either specialized services or add-ons to existing relationships. When competition increased, price became the main order-winner. Many clients were unaware of the differences in quality among vendors and were willing to go with the cheapest vendor. We took a decision not to compete on price. We lost some clients initially. Today, strong processes and credibility are the mainstay of the long term players. We have also experimented with outsourcing. Education verification and address verification require a large organization in each part of the country. We now outsource these checks to regional vendors through our vendor management team. We do not outsource employment verification, which is based on centralized relationship building with corporations.
>
> Our productivity depends on the industrial environment. Over the past few years, our clients have realized the value of background screening. We have spent resources on trying to educate clients and build standards for verification. Corporations and educational institutions have also improved their processes along with us. Many of them now have dedicated personnel to respond to verification requests. Some educational institutions provide this as a standard service for fee.
>
> Background screening has expanded beyond the BPO and IT industries. We have clients in insurance, banking, management consulting, pharmaceutical, telecom and many other industries. The types of companies and employee profiles differ across them. The depth of penetration of background screening also varies, but is still less than 10%. There is a huge potential for future growth.
>
> I like to solve problems by building business solutions around them. Some of our clients are asking us to offer a data vault in which they will outsource their employee records to us. We shall maintain the records, provide timely and less expensive background verification, and offer value-added analytical services on employee risk management. Another idea I am exploring is to allow individuals to register with us and get their background information verified. They can then refer to AuthBridge when applying for a job.
>
> Our database has not reached critical mass yet. We get few enquiries for which we have done verification before. Also, the data entry operators are not sufficiently careful in avoiding duplicate entries. We have to get that part of the process in control. Once the database reaches critical mass, we will able to exponentially improve our efficiency and price competitiveness. I am willing to allow competitors to access our database. We don't want to be alone in this business. In the US, the three credit rating agencies allow each other to access their databases. We want to build a similar model here.

> Another area of growth for us is international expansion. We do not get many enquiries from foreign companies because they have longstanding contracts with international players in the market. But our processes in India are superior.

According to Pradhan, the background screening industry in India is still in its nascent phase, and there are many challenges. She said: "There are many organizations that, as a policy, do not share information with third parties for verification purposes. For organizations that share information, it sometimes takes a long time because databases are manually maintained and verification involves going through old physical records. Many organizations do not maintain databases or records for temporary employees, which lead to delays or incomplete verification. Criminal records, which can be accessed online in many developed countries, have to be sought locally in the concerned jurisdictions. Since digitization is at an early stage, we have to depend on manual verification. This can be time consuming and expensive."

Raviraj Singh, Senior Manager in Employment Verification, said that there are many opportunities ahead for improving the process.

> The employee turnover in India is very high due to the rapid growth in opportunities. Our business is not immune to this. Productivity varies dramatically across experienced and new employees. I have to shift people between Research, Initiation and Verification to balance workload. BRIDGE enables us to collect a lot of data to measure productivity. We can track the amount of time a case spends in different stages of follow through. We can also track conversion rates across employees. I listen into Initiation and Verification phone calls made by employees to train them and improve their conversion rates.
>
> It is also a challenge to decide the prioritization of checks to process on any day. There are many criteria, such as the client relationship, the due date, the number of checks pending, and the stage in the process. We use a simple rule at present, but we don't know if it is optimal. Our work in process inventory is about 3,000 checks, and we receive about 200 checks a day. We would like to be faster.

## Exhibit 1. The BPO Industry in India

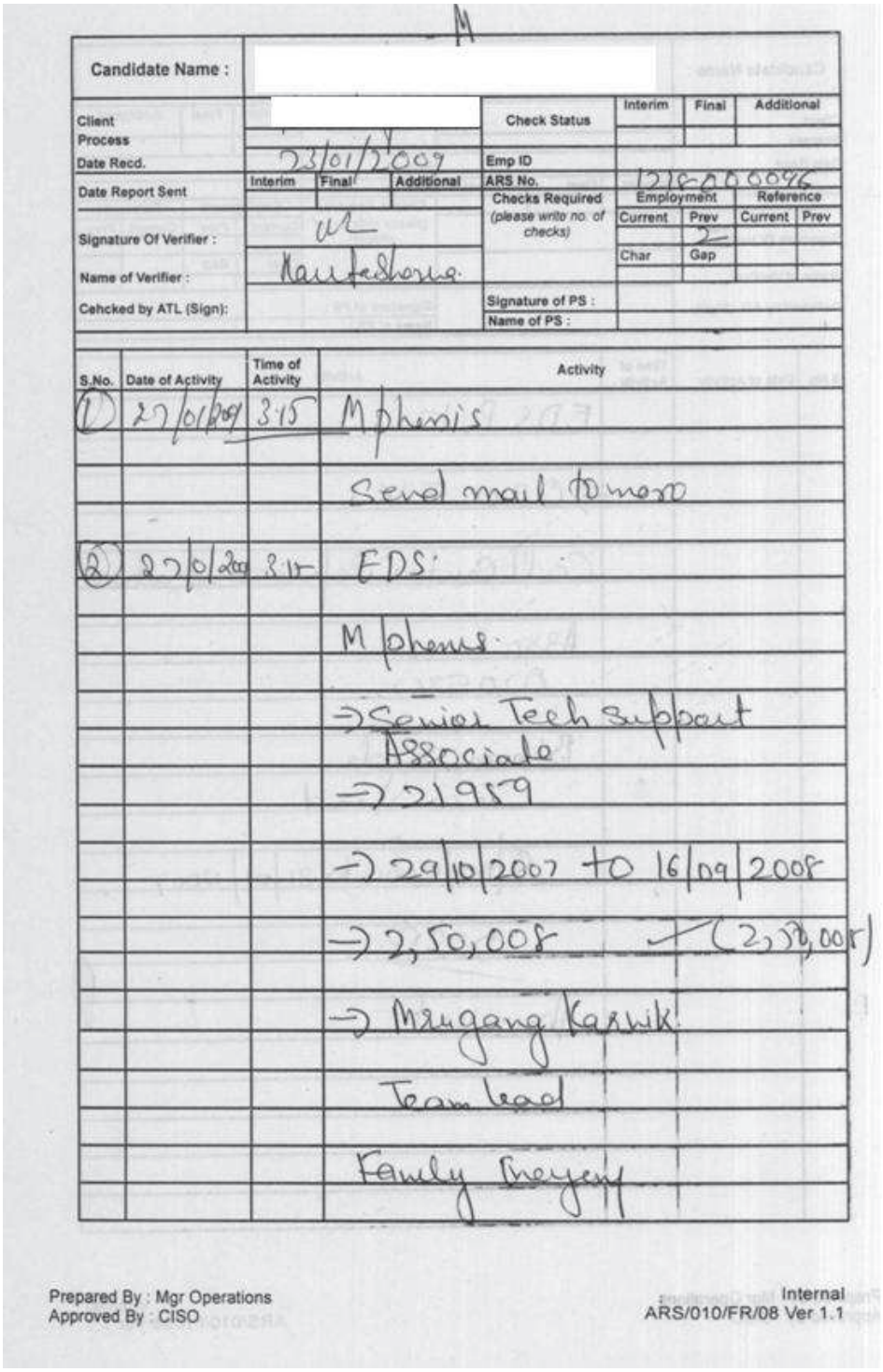
The Business Process Outsourcing (BPO) industry in India grew by leaps and bounds in the 2000s, providing back office functions to firms in diverse industries all over the world. This industry had its genesis around 1995 when General Electric (GE) made a case for captive back office operations in India. GE Mergers & Acquisitions asked Anderson Consulting to explore the market for third party vendors. In 1997, GE flagged off captive BPO operations in Gurgaon by setting up a subsidiary named GE Capital International Services (Gecis). Around the same time, British Airways set up a 30-person captive back office in Mumbai to undertake data entry work, and American Express began planning its own operations in India.

While the initial back office operations were wholly owned subsidiaries of global companies, a third party BPO service industry was born in 1999 when Daksh eServices started in Gurgaon to take advantage of the internet boom and offer email support services. Daksh led in creating tiered business models around email support services. Several companies followed Daksh's example with investment from venture capital funds. In the year 2000, these included Spectramind in Gurgaon, and CustomerAsset and 24/7 Customer in Bangalore.

This started a gold rush that continued into 2002-03. Voice based services and call centers grew after the dotcom crash. Firms such as Dell, HSBC, Standard Chartered, AOL, and HP set up customer support services. Telemarketing industry grew rapidly. Private equity investors, Indian IT services majors, and large corporate houses invested in third party BPO. By 2003, India's BPO revenues had grown to $2.7 billion, with 60% of the market constituted by voice based services. The third party firms increased their scale and diversified service lines through aggressive M&A led strategies. WNS became the first Indian third party BPO firm to hit $100 million in revenues. IBM bought Daksh for $130 million. Large global companies entered India's BPO market.

By year 2005, mergers & acquisitions had led to a consolidation of this industry. Four types of third party service providers emerged: (i) Indian scale players with multiple service lines across the value chain, such as Genpact, I-One Source, EXL, and WNS: (ii) multinational third party players, such as Convergys, ADP, and Hewitt; (iii) firms offering integrated information technology and BPO services – Infosys, Wipro, IBM, Accenture; and (iv) niche players like Evalueserve, Office Tiger, Marketrx and Indecomm. New firms continue to emerge, but are now looking at different business models. Moreover, players in all categories are moving towards high-end, knowledge-based services like analytics and market research.

**Exhibit 2. A Sample Top Sheet**



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Candidate Name : | | | | | | | |
| Client | | Check Status | Interim | Final | Additional | | |
| Process | | | | | | | |
| Date Recd. | 23/01/2009 | Emp ID | | | | | |
| Date Report Sent | Interim / Final / Additional | ARS No. | 1218-000096 | | | | |
| | | Checks Required (please write no. of checks) | Employment | | Reference | | |
| Signature Of Verifier : | | | Current | Prev | Current | Prev | |
| | | | | 2 | | | |
| Name of Verifier : | Manjeshwara | | Char | Gap | | | |
| Cehcked by ATL (Sign): | | Signature of PS : | | | | | |
| | | Name of PS : | | | | | |

| S.No. | Date of Activity | Time of Activity | Activity |
|---|---|---|---|
| 1 | 27/01/09 | 3:15 | Mphasis |
| | | | Send mail to mam |
| 2 | 27/01/200 | 3:15 | EDS |
| | | | Mphasis |
| | | | → Senior Tech support Associate |
| | | | → 21959 |
| | | | → 29/10/2007 to 16/09/2008 |
| | | | → 2,50,008 (2,50,008) |
| | | | → Mayang Kashik |
| | | | Team lead |
| | | | Family Emergency |

Prepared By : Mgr Operations
Approved By : CISO

Internal
ARS/010/FR/08 Ver 1.1

**Exhibit 3. Steps in the creation of BRIDGE**

**STAGE I:** Creation of a solution for Education Verification where routes to the verification could be mapped.

Functionality: To give verifiers visibility of allocated work and availability of data.

- Users had access and rights based on logins.
- *Check start* date, *insufficiency raised* date, *insufficiency fulfilled* date and *check completed* date were captured.
- Users had to work off-line & update the application. No control.

**STAGE II:** Conversion and automation of Spreadsheets to a simple workflow solution

Functionality: To give visibility to all those who had logins to TAT-wise Status, Client-wise TAT-wise Status

- Users had access and rights based on logins.
- *Check start* date, *insufficiency raised* date, *insufficiency fulfilled* date and *check completed* date were captured.
- Only number of checks per case could be captured
- Only case level TAT was captured
- No Antecedents or documents were part of this application
- No action history
- Users had work off-line & update the application. No control.

**STAGE III:** Complete automation of the process

Functionality: A Management Tool with data at granular level for analysis, management and prioritization.

- Solution captures all the details, documents, responses, and action history
- Captures all the dates. Multiple dates for same action also captured.
- Case & Check TAT mapped separately & re-calculation of case TAT
- Auto-triggering of cases/checks to next function
- Auto-generation of report
- Allows checks to be completed individually
- Better control on the stages of progress of a check.

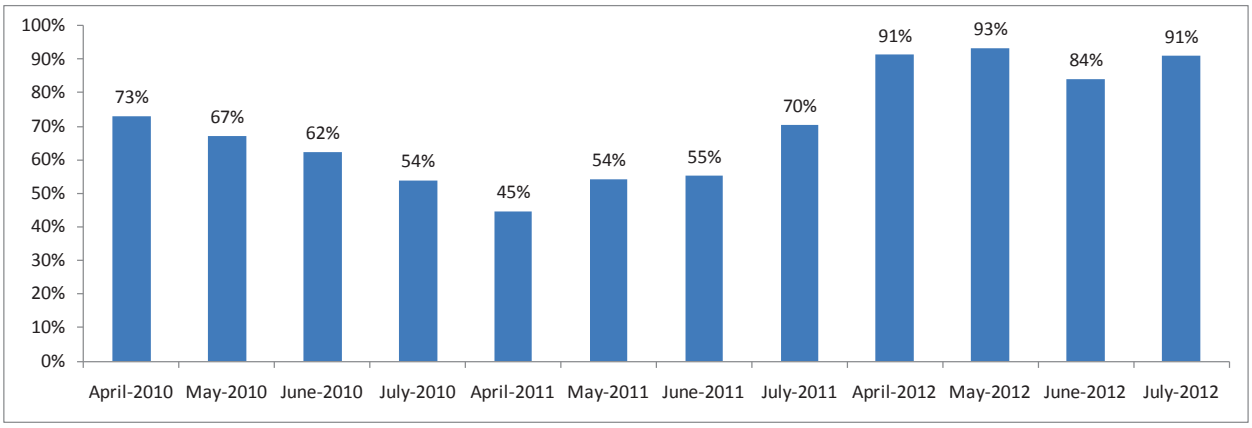
**Exhibit 4 Changes in Productivity in AuthBridge's Operations from 2006 to 2012**

**(a) Trends in revenue per headcount**

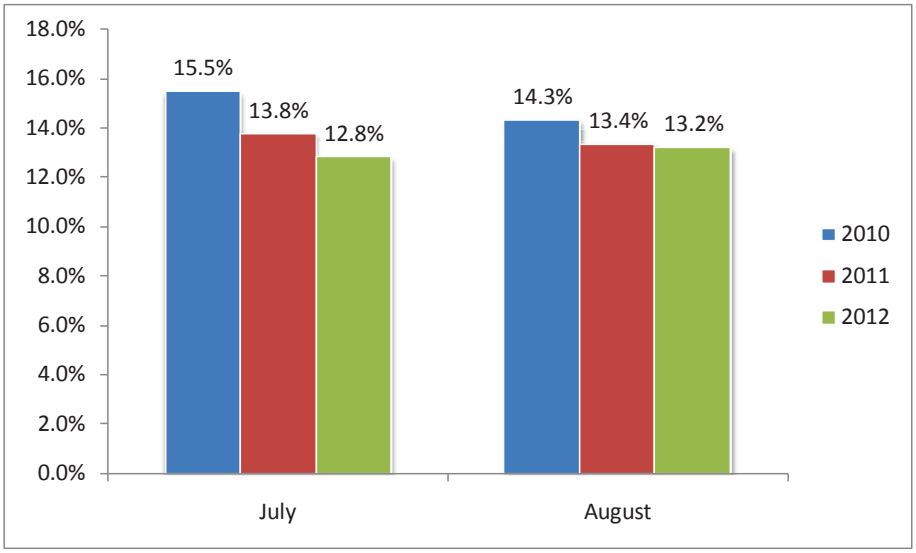
| Year | Revenue | Headcount (HC) | Revenue/HC ratio |
|---|---|---|---|
| **2006** | 1 | 1 | 1.00 |
| **2007** | 18.5 | 6 | 3.08 |
| **2008** | 73.8 | 14 | 5.13 |
| **2009** | 83.8 | 15 | 5.62 |
| **2010** | 95.9 | 21 | 4.63 |
| **2011** | 132.5 | 16 | 8.13 |
| **2012** | 107.4 | 12 | 9.10 |

Notes: Revenue and headcount data for 2006 are normalized to 1.0. Data for 2012 are for part of the year.

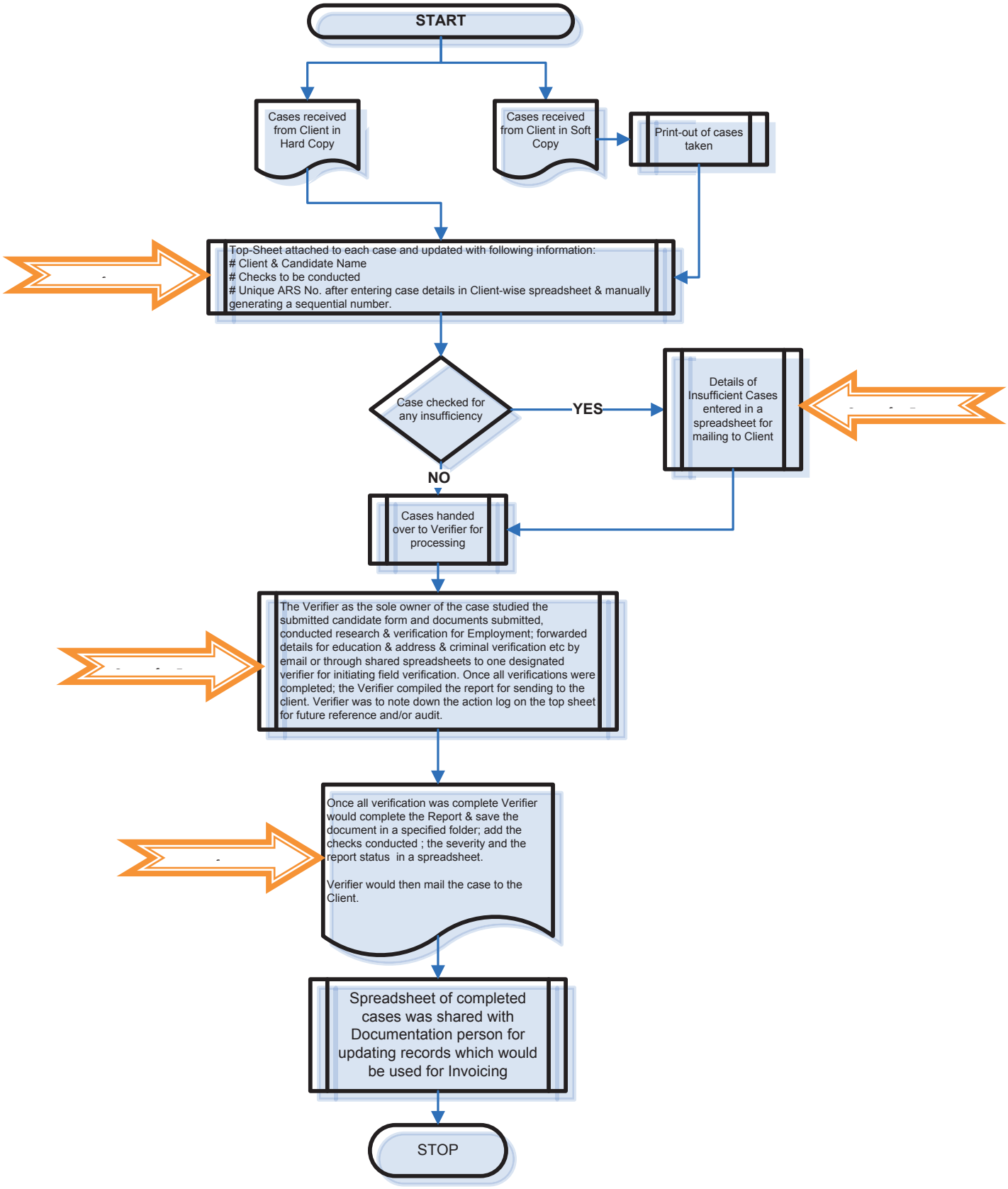
**(b) Trends in % of Cases Sent within TAT Time**




**(c) Trends in % of Cases UTV (Unable To Verify)**



## Exhibit 5 - First Process Flow



## Exhibit 6. Split Process Flow – Employment & Education

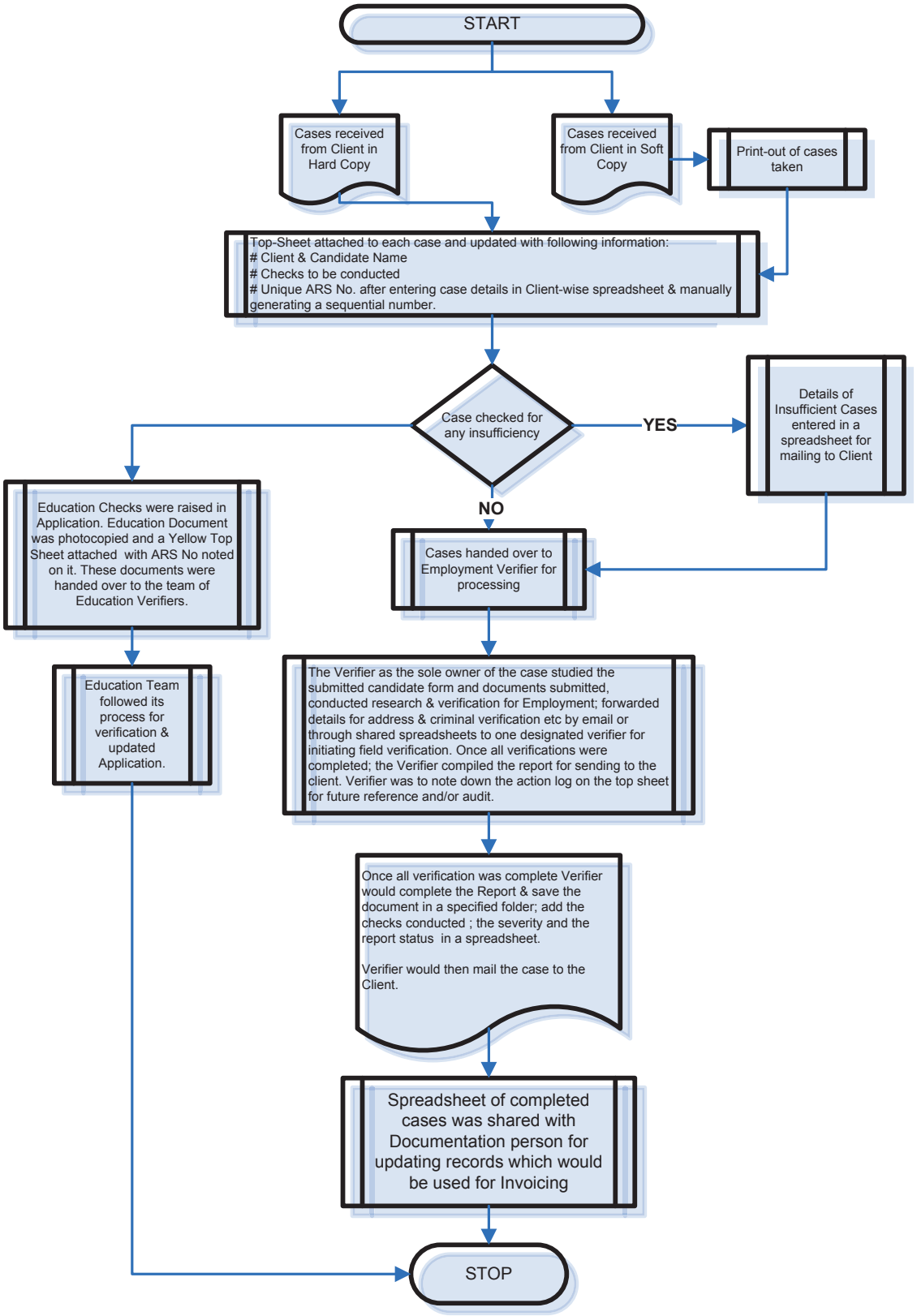


**Exhibit 7. Process Flow – Post BRIDGE**

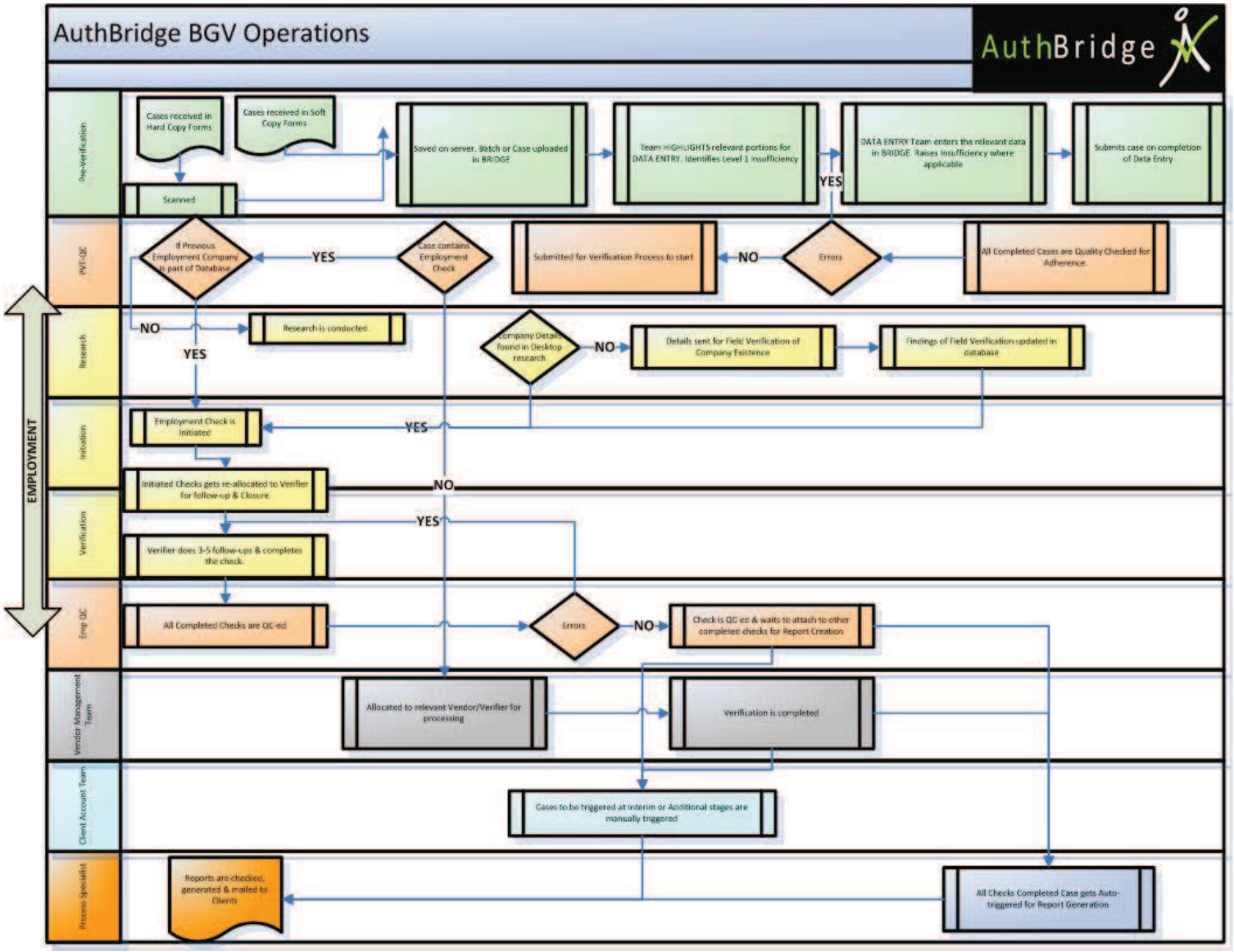


**Exhibit 8. List of major companies competing in the market for background verification in India in 2011 (in alphabetical order)**

1. AuthBridge Research Services Private Limited
2. CRP Technologies [India] Private Limited
3. EValuationz India Private Limited
4. First Advantage Private Limited
5. Footprints Collateral Services Private Limited
6. Integrity Verification Services Pvt. Ltd.
7. KPMG
8. Matrix Business Services India Private Limited
9. PAMAC Finserve Private Limited
10. PINKERTON Consulting & Investigations (India) Pvt. Ltd
11. Premier Shield Private Limited
12. Vibrant Screen Private Limited