Chapter 3

Information Gathering

3.1 Introduction

Information gathering is an art and a science. The approach and manner in which information is gathered require persons with sensitivity, common sense and a knowledge of what and when to gather and what channels to use in securing information. Additionally, the methodology and tools for information gathering require training and experience that the analyst is expected to have. This means that information gathering is neither easy nor routine. Much preparation, experience and training are required.

To gather information from the organization different kinds of tools are used. The analyst must decide on the information gathering tool and how it must be used. Although there are no standard rules for specifying their use, an important rule is that information must be acquired accurately, methodically, under the right conditions and with minimum interruption to user personnel. So, it is necessary to be familiar with various information gathering tools. Each tool has a special function, depending on the information needed.

As we are going to make an analysis on the prevailing system of Rajshahi education board. So we have gathered the required information from different sections of education board using four tools.

3.2 Information gathering using different tools

In this section we have presented the information we have collected from the respective organization.

3.2.1 Forms, documents and statistical chart of Rajshahi education board

Very few system problems are unique. The increasing number of software packages suggests that problem solutions are becoming standardized. Therefore, as a first step, a search of literature through professional references and procedures manuals, textbooks, company studies, government publications or consultant studies may prove invaluable.

We have collected several forms, manuals and important news from the newspaper related to Rajshahi education board. In section 3.2.1.1 we have included the citizen's charter of Rajshahi education board. In section 3.2.1.2 we have included the application form for duplicate certificates. In section 3.2.1.3 the application form for correction of age and name is included. In section 3.2.1.4 the OMR of cover page of the theory script is included. The statistics of number of examinees, results etc. of seven years of JSC, SSC and HSC examinations are included in section 3.2.1.5, 3.2.1.6 and 3.2.1.7 respectively.

3.2.1.1 Citizen's charter

Actually in this manual, all the services provided by education board are stated. This board provides different kinds of services like drawing duplicate certificates, name, age or father's name, mother's name correction, re scrutinized certificates, admit card, registration form etc. Moreover

board looks after on school managing committee, school ad-hoc committee, inclusion of new group, academic recognition of school, colleges etc.

The above discussion are elaborately contained in figure 3.2.1.1(a), 3.2.1.1(b) and 3.2.1.1(c) respectively.

	জন্ম বোর্ডের বিভিন্ন	মাধ্যমিক ও উচ্চ মাধ্যমিক শিক্ষা বোর্ড রাজশা <u>দেবা প্রদান প্রতিপ্রতি (CITIZEN'S CHARTER)</u> শাবার যে সমন্ত কাল নর তার বিবরণ এবং প্রয়োলনীর সকল শ লমানানের তারিব থেকে নিস্পত্তির সম্ভাব্য সময়সীমা হক	ু রুমহ পুরণকৃত আবেদনপত্র	
জনিক নং	विषय	যে সমত কাগজপত্র দাখিল করতে হবে তার বিবরণ	অত্র বোর্ডের সচিবের অনুস্কৃত প্রযোজ্য ক্ষেত্রে নিদ্রতিবিত নির্মারিত ফি দাবিল করতে জ্বে	নিম্পত্তির সময়সীমা
31	স্থানিয়র/মাধ্যমিক/ উচ্চ মাধ্যমিক ছুপ্লি কেট নম্বরপত্র /সনদপত্র	ক) প্রথন শিক্ষক /জধ্যক্ষের সুপরিশকৃত নির্মারিত আবেদন করমে আবেদন। ব) পানার জি.ডি। গ) দৈনিক পত্রিকার বিজ্ঞান্তিতে প্রয়োজনীয় তথ্যের সাথে জুনিয়র/মাধ্যমিক/উচ্চ মাধ্যমিক গরীক্ষার নাম এবং ১. কেন্দ্রের নাম, ২. রোল নম্বর, ৩. পাশের সন ও ৪. শিক্ষা ব্যার্ভের নাম অবশ্যই উদ্ভোধ পাকতে হযে।	সাধারণ ২০০/- জরুমী ১০০/- ২০০/-+১০০/- = ৩০০/-	সাধারণ ০৫ জনুমী ০৩ কার্যদিবস
श	ইংরেকী ভাষার ব্যুনিরর/মাধ্যমিক/ উচ্চ মাধ্যমিক ভূপ্লি কেট নম্বরপত্র/ সনদপত্র উর্রোলন।	ক) প্রধান শিক্ষক /জধাক্ষেত্র গ্রুপরিশকৃত নির্মারিত আকোন করমে আকোন। ব) পানার জি.জি। গ) দৈনিক পত্রিকায় বিজ্ঞান্তি। ঘ) ১ নং 'গ' এর অনুরূপ।	সাধারণ ২০০/-+২০০/- = ৪০০/- জনুমী ২০০/- + ২০০/- + ১০০ = ৫০০/-	সাধারণ ০৫ জনুমী ০৩ কার্যদিবস
01	ন্ধনিরর/মাধ্যমিক/ উচ্চ মাধ্যমিক ছৃপ্লি কেট, ত্রি- নকল, টৌ-নকল নম্বরপত্র /সনদপত্র উত্তোলন।	ক) প্রধান শিক্ষক/জধ্যক্ষেত্র সুপারিশকৃত নির্ধারিত করমে আবেদন। ব) পানার স্থি,ডি। গ) ১ নং এর গ এর অনুরূপ	ত্রি-নকল ৪০০/- চৌ-নকল ৫০০/-	০৫ কার্মনিবস
81	ছ্বনিয়ন/মাধ্যমিক/ উচ্চ মাধ্যমিক ছপ্তি কেট প্রবেশপত্র /নিবছনপত্র উপ্তোলন	ক) প্রধান শি ক্ষক/জ থ্যক্ষেত্র সুপারিশকৃত আবেদন।	সাধারণ ২০০/- জনুমী ২০০/-+১০০/- = ৩০০/- ৩ কার্যদিবসের মধ্যে	সাধারণ ০৫ জনুমী ০৩ কার্যদিবস
Œ1	ভূনিরর/মাধ্যমিক/ উচ্চ মাধ্যমিক নম্বরপত্র/সনদপত্র/ নিবন্ধন পত্র ইংরেকী ভাষার বুপান্তর করপ।	ক) প্রধান শিকক/অধ্যক্ষের সুপারিশকৃত নির্ধারিত করবে আবেদন। ব) মূল নম্বরপত্র/সনদপত্র/নিবন্ধনপত্র	সাধারণ ২০০/- জনুমী ২০০/-+১০০/- = ৩০০/-	সাধারণ ০৫ জনুমী ০৩ কার্যদিবস
61	ভুনিয়র/মাধ্যমিক/ উচ্চ মাধ্যমিক	ক) প্রধান শিক্ষক/অধ্যক্ষেত্র সুপারিশকৃত নির্ধারিত ফরযে আবেদন।	সাধারণ ২০০/-+২০০/-	সাধারণ ০৫

Figure 3.2.1.1(a) Citizen's charter

Figure 3.2.1.1(b) Citizen's charter

व्यक्तिक नह	বিষয় নিল (ছাত্ৰ/ছাত্ৰীর) জন্ম তারিধ সংশোধন।	যে সমন্ত কাগজপত্র দাখিল করতে হবে তার বিবরণ এর কপি, মূল রেজিস্ট্রেশন কার্ড ও মূল প্রবেশপত্র সংযুক্ত করে প্রধান শিক্ষকের সুপারিশসহ করমে আবেদন করতে হবে। ব) আচার এইলড গ) ওভার এইলড গ) ব্যালভার ভুল	অত্র বোর্ডের সাঁচবের অনুকূপে প্রয়োজ্য ক্ষেত্রে নিদ্রবিধিত নির্ধারিত কি সাধিল করতে হবে ৭০০/-	নিম্পত্তির সময়সীমা কার্যদিবস
331	বিদ্যালয় মঞ্জরি নবায়ন	ক) প্রধান শিক্ষক কর্তৃক বাক রিত নির্ধারিত করমে আবেদন (পূরণকৃত ১৩১৫ নং করম)। ব) ছি.ছি. মাধ্যমিক ও উচ্চ শিক্ষা, রাজশারী অঞ্চল, রাজশারী এর সুপারিশ (যদি জোলা শিক্ষা অফিসার পরিদর্শন করেন) গ) জোলা শিক্ষা অফিসারের পরিদর্শন প্রতিবেদন। ম) লংমক্ষিত তর্কালে ৫০,০০০/- (পঞ্চমশ ফালার) টাকার এক-ছি.আর/ সঞ্চয় পক্রের কটোকপি (প্রধান শিক্ষক কর্তৃক সভ্যারিত)। ৪) সাধারণ তর্কালে ৩০,০০০/- (ত্রিশ ফালার) টাকার ব্যাংক সনদের কটোকপি (প্রধান শিক্ষক কর্তৃক সভ্যারিত)। চ) বিদ্যালয়ের জমির হাল সন নাগাদ পর্যন্ত খাজনা পরিশোধ রশিদের কটোকপি (প্রধান শিক্ষক কর্তৃক সভ্যারিত)। হ) ব্যালাস শীট। হা) ব্যালাস শীট। হা) সর্বশেষ অভিট রিপোর্ট। বা) কিলত ০৩ (তিন) বছরের এক্থেন্সি গ্রীকার কলাকলের পরিসংখান।	€,000/-	পরিদর্শন প্রতিবেদন প্রাপ্তির পর স্বীকৃতি/ অনুমতি নবায়ন ১৫ কার্যদিবস
33.3		স্থায়ী ৰীকৃতি কি প্ৰেতি বছর নবায়ন যোগ্য নিৰ্ধায়িত কি দিয়ে)	30,000/-	
অনীক নং	विषय	যে সমক্ত কাগজপত্র দাখিল করতে হবে তার বিবরণ	অব বোর্ডের সচিবের অনুক্লে প্রযোক্ত ক্লেত্রে নিম্নিশিবিত নির্ধারিত ফি দাধিল করতে হবে	নিম্পত্তির সময়সীমা
751	বিদ্যালয় ম্যানেঞ্ছিং কমিটি।	ক) প্রধান শিক্ষকের আবেদনসম পূর্ণান্স আর্থিকা। ব) জেলা শিক্ষা অফিসারের সুপারিশ গ) প্রিরাইডিং অফিসারের নিয়োগপত্র।	@oo/-	৩০ কাৰ্যদিবস

Figure 3.2.1.1(c) Citizen's charter

3.2.1.2 Duplicate form

Sometimes the students accidentally lose their main copy of certificate and academic transcript. If they lose their main copies then they can again draw that document from board and for that they have to fill up the following form and apply to board through their institution head.

Figure 3.2.1.2 shows the application form.

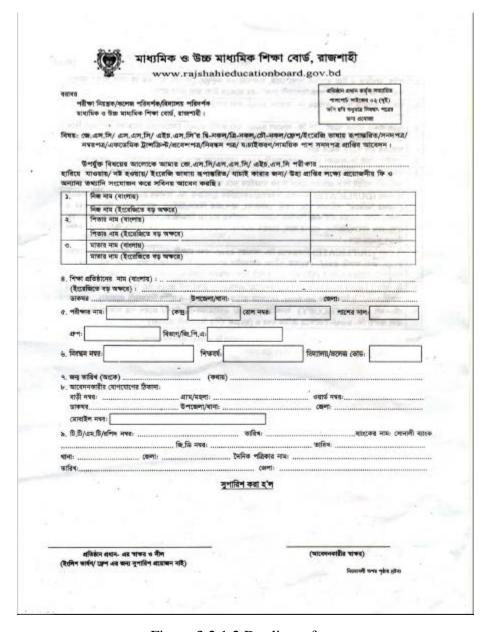


Figure 3.2.1.2 Duplicate form

3.2.1.3 Name and age correction form

If there is any mistake in the registration form of the students then it can be corrected by applying to the board for correction of that mistake. The students apply to the board for correction of mistake by filling the following form through their institution.

Figure 3.2.1.3 contains the name and age correction form.

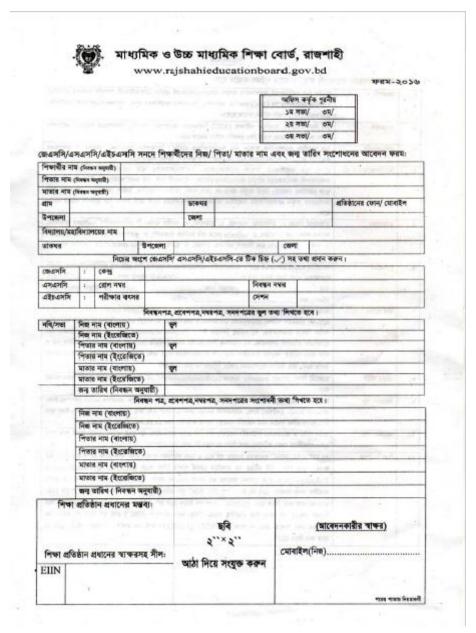


Figure 3.2.1.3 Name and age correction form

3.2.1.4 View of OMR sheet

This OMR sheet is used as the cover page of the answer script. The sheet is divided into three parts. One for the examinees and other two parts are for the examiners. The examinees fill up the given circles with their information like roll no, registration number, subject code etc. This sheet is made extremely secured. They have used binary coding system here to keep the student information top secret. 31 bit code is used in the upper portion of the sheet where the black circle is considered as 1 and the white one is considered as 0.

Figure 3.2.1.4 contains a view of OMR sheet.

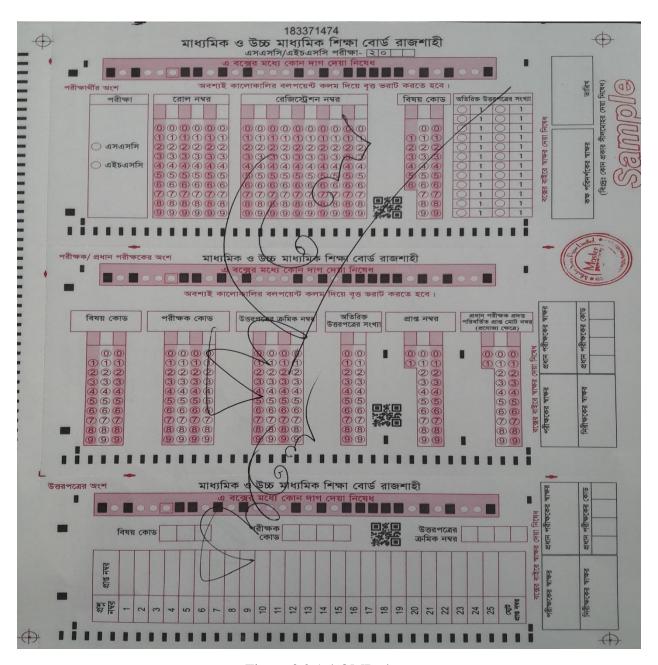


Figure 3.2.1.4 OMR sheet

3.2.1.5 Statistics of JSC

Here in this chart, the board published a comparative study for last seven years. They considered many criteria like percentage of pass, percentage of pass female, percentage of pass male, total number of students passed, total number of examinee present, total number of GPA 5.00 holders, total number of students expelled, total number of school, total number of school with 100% pass etc.

মাধ্যমিক ও উচ্চ মাধ্যমিক শিক্ষা বোর্ড রাজশাহী জুনিয়র স্কুল সার্টিফিকেট পরীক্ষার

একনন্ধরে ৭ (সাত) বছরের তুলনামূলক পরিসংখ্যান

ক্ৰঃ নং	বিবরণ	507/9	2028	২ 058	\$050	3023	5077	5070
02	পাশের হার (%)	à9.bb	99.89	৯৫.৩২	२०.५५	FC.0%	99.66	60.00
০২	ছাত্রীর পাশের হার (%)	89.82	à9. 0 9	68.96	३७.१२	P4.84	99.50	60.6F
00	ছাত্রের পাশের হার (%)	%9.8≎	୬୨.୯୫	३ ४.३६	\$8. 0 0	৮৫.৩২	৮०.९०	୫୯.୭୫
08	পাশের সংখ্যা	২২১৬১৭	₹2₽o₽8	292200	১৭৩১৬৬	264496	696684	60906
00	উপস্থিত পরীকাশীর সংখ্যা	২২৬৮৯২	২২৩৭৫৪	২০০৫১৩	2A88G0	220048	224482	280900
oь	উপস্থিত ছাত্ৰী সংখ্যা	228029	228464	১০২২২৪	36906	\$86.60	৯৬৩০২	৭২৩৫৩
09	উপস্থিত ছাত্র সংখ্যা	22220P	১০৮৯৮৭	৯৮২৮৯	90926	८७७०६	\$280\$	92060
OP	জিপিএ ৫.০০ প্রাপ্ত ছাত্র সংখ্যা	72.696	29096	228A8	70019	৩২৭৪	২২৯০	P&4
0%	জিপিএ ৫.০০ প্রাপ্ত হাত্রী সংখ্যা	২১৮৭৬	25475	25255	20806	২৯৪৭	2955	422
20	জিপিএ ৫.০০ প্রাপ্ত ছাত্র/ছাত্রী সংখ্যা	80895	৩৫০৮৩	২৩৬০৬	২০৫২৩	৬২২১	8454	7608
22	বহিস্কৃত পরীক্ষাধীর সংখ্যা	29	54	b	90	00	ъ	G
25	০% ফলাফল প্রাপ্ত স্কুলের সংখ্যা	2	à.	e	œ	20	৩৮	৬৩
20	১০০% পাশকৃত ফুলের সংখ্যা	2628	2826	2090	98%	୯୯୧	કહ	78
78	কেন্দ্র সংখ্যা	২৩৩	২২৫	522	794	295	294	242
50	মোট জুল সংখ্যা	২৯৭০	२३८७	২৮৯১	২৮৮০	২৮৮৮	2490	২৮৫৩

Figure 3.2.1.5 Statistics of JSC

3.2.1.6 Statistics of SSC

Secondary School Certificate examination is one of the most important exams in any student's life in our country. A comparative study of SSC exam for last seven years are shown in this chart. In this year, the number of examinees are increased but the number of students passed in SSC are decreased and less number of students got GPA 5.00 than last year.

মাধ্যমিক ও উচ্চ মাধ্যমিক শিক্ষা বোর্ড রাজশাহী মাধ্যমিক স্কুল সাটিফিকেট পরীক্ষার

একনজরে ৭ (সাত) বছরের তুলনামূলক পরিসংখ্যান

ङ वश	বিবরণ	২০১৭	২০১৬	২০১৫	5078	২০১৩	5025	5022
٥٥	পাশের হার (%)	¥0.90	₩2.90	48.49	\$6.68	\$8.00	PP.00	F0.05
02	পাশের সংখ্যা	767809	785675	25220F	229.690	200-002	229665	208877
00	পরীকারীর সংখ্যা	১৬৭৫২০	১৫২৭৮৩	252000	250225	225.950	১৩২৬৬০	১৩০৭৯৬
08	উপস্থিত পরীকারীর সংখ্যা	১৬৬৯৩৮	১৫২০৫৬	১২৭৫২০	১২২১৬৮	228Fe5	202266	266666
02	অনুগন্থিত গরীকারীর সংখ্যা	923	929	৭৮৩	2028	966	960	F0?
06	উপস্থিত মোট হাত্রী সংখ্যা	P0779	93830	৬০৮৩১	ere98	68708	৬২৯৫৪	62,286
٥٩	ছাত্রীর পাশের হার (%)	\$2.88	৯৫.৮৭	à@.0à	\$6.60	¥8.6×	PP.03	95.06
아	উপস্থিত মোট হাত্র সংখ্যা	৮৬৭১৯	৭৯৬৩৩	64666	86200	৬০৭২৮	65022	6998 %
09	ছাত্রের পাশের হার (%)	\$0.05	≥0.00	৯৪৮৬	46.54	69.06	PP.09	F2.2F
20	ছিপিএ ৫.০০ প্রাপ্ত ছাত্র/ছাত্রী	29089	১৭৫২৪	১৫৮৭৩	29576	25500	১০৭২৬	9,509
22	দ্বিপিএ ৫.০০ প্রাপ্ত ছাত্রী সংখ্যা	⊬ २98	P2P9	ঀঽ৬১	F##0	৫২১০	Seee	8220
25	ছিপিএ ৫.০০ গ্রাপ্ত ছাত্র সংখ্যা	2092	2802	F-625	20F56	9 9	6242	e959
20	বহিত্ত পরীকাবীর সংখ্যা	20	00	ঽ৮	২৩	90	3e	ঽঀ
28	০% কলাকল প্রাপ্ত ভুলের সংখ্যা	3	Q	0	0	3	0	0
50	০%-১০% ফলাফল গ্ৰাপ্ত স্কুল	0	0	0	0	2	٥	٥
20	১০০% পাশকৃত ভুলের সংখ্যা	859	P-00	265	2066	৬৬৭	২৮৯	90
39	কেন্দ্ৰ সংখ্যা	২৩২	২২৭	258	550	26.9	200	266
26	মোট ভুল সংখ্যা	২৬৩২	২৬১৩	२८৮৮	ર ∉8ર	২৪৫৮	২৪৩৩	২৩৭৬
29	নিয়মিত পরীকাবী সংখ্যা	\$60888	286420	250900	226605	৯৯৬৭৫	204299	206996
20	নিয়মিত উপস্থিত পরীকাষী সংখ্যা	\$6008e	38e8e8	\$50806	১১৫২৭৫	\$\$8¢\$	2005-08	১০৫৬৪৩
42	অনুপস্থিত নিয়মিত হাত্ৰ/হাত্ৰী সংখ্যা	७३৮	৩৮৬	594	રહ૧	256	900	944
44	নিয়মিত পাশের সংখ্যা	386009	7098eF	224265	222540	৯৫০৫৭	২৫৬২ ৭	৮৬২২৫
20	ছিপিএ ৫,০০গ্ৰাপ্ত নিয়মিত ছাত্ৰ/ছাত্ৰী সংখ্যা	24799	2484@	26260	22052	2/2777	20962	20098

Figure 3.2.1.6 Statistics of SSC

3.2.1.7 Statistics of HSC

In this chart, an overall statistics in different criteria of last seven years are shown. It is crystal clear from this statistics that the number of students are increasing every year. Percentage of student passed in this year is degraded than last year. The number of GPA 5.00 holder students also decreased.

মাধ্যমিক ও উচ্চ মাধ্যমিক শিক্ষা বোর্ড রাজশাহী উচ্চ মাধ্যমিক গার্টিফকেট পরীক্ষার

একনজরে ৭ (সাত) বছরের তুলনামূলক পরিসংখ্যান

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क्र8 न१	विवत्रभ	2059	2036	2020	₹ 078	2020	5025	5027
٥٥	পাশের হার (%)	95.00	98.80	99.68	99.66	99.64	9≽.88	99.05
02	পাশের সংখ্যা	৮৬৮৭২	F4007	P7000	F4450	F2007	F4864	67049
00	মোট প্রাক্ষাধীর সংখ্যা	2482F4	349948	204709	220009	200959	209999	92200
og	উপস্থিত প্রাকাষীর সংখ্যা	272500	225320	208555	777920	১০৫০৭২	206206	99025
08	উপস্থিত মোট হাত সংখ্যা	৬৭০৬২	60906	@8988	69299	6.900-	@@\$20	85250
06	ছাত্রের পার্শের হার (%)	e9.8e	99.93	98.৮৯	96.29	90.00	90.90	96.98
09	উপস্থিত মোট হাত্ৰী সংখ্যা	e8998	৫২০৭৪	85220	e3958	86448	89475	02662
0.F	ঘাঠীর পাশের হার (%)	96.05	96.90	৮০.৬৭	F2.2F	৮০.৭২	F3.66	¥3.93
03	দ্বিপিএ ৫.০০ প্রাপ্ত দাত্র সংখ্যা	2909	05.20	ঽ৮৬৫	0,440	02-60	0600	2989
20	দ্বিপিএ ৫.০০ প্রাপ্ত দ্বারী সংখ্যা	২৩৫৫	২৪৯৩	২৩৮৫	0985	02-70	৩৩৭২	২৬৩৯
22	দিপিএ ৫.০০ প্রাপ্ত হাত্র/হাত্রী	e ५ के 8	৬০৭৩	৫২৫০	9685	9000	৬৮৭২	6622
25	ৰহিত্বত প্রাক্ষাধীর সংখ্যা	30	25	2e	52	03	90	80
20	এক বিষয়ে অকৃতকার্য হাত্র/হাত্রী	২৭৪৬১	24220	20995	28959	25429	20209	2002
78	এক বিষয়ে অভূতকার্যের হার	22.68	\$8.9⊬	30.08	30.30	25'70	25.60	\$0.96
26	০% কলাকল গ্ৰাপ্ত কলেজ সংখ্যা এবং হাত্ৰ	2.8+% 2.8+%	+	e	W	60	8	9
20	>০%-১০% কলাকল প্রাপ্ত কলেজ সংখ্যা এবং হার	o70% ?	0	2	0	0	8	6
39	১০০% গাশকৃত কলেজ সংখ্যা এবং হার	44 4.26%	20-	২৬	26	*	25	26
26	>১০%-৫০% গাশকৃত কলেজ সংখ্যা এবং হার	४०४ ३७.१७%	42	02	২৬	0)	২৭	22
24	>৫০% - ৯৯% পাশকৃত কলেজ সংখ্যা এবং হার	609 90.05%	92÷	925	925	607	920	955
ąo.	কেন্দ্র সংখ্যা	248	75.0	266	22-5	70-0	290	390
45	মোট কলেজ সংখ্যা	982	956	७३२	992	68e	687	e08

Figure 3.2.1.7 Statistics of HSC

3.2.2 Observation on working process of Education board

Actually, this is known as onsite observation. Onsite observation is a very effective tool to gather information. The major objective of on-site observation is to get as close as possible to the real system. Keeping in mind the following questions, helps to gather important information observing the system.

- What kind of system we are observing.
- The people running the system and who are important people of the system.
- The history of the system and the evolution of the system to current stage.
- How the system responses to internal and external crisis.

Four alternative observation methods are used usually.

- Observation can be natural or contrived. A natural observation occurs in employee's place and contrived observation is set up by the observer in a place like laboratory.
- It can be obtrusive or unobtrusive. In an obtrusive observation the respondent knows he/she is being observed but in an unobtrusive observation the respondent doesn't know.
- It can be direct or indirect. A direct observation takes place when the observer actually observes the subject. But in case of indirect observation mechanical devices are used to capture information.
- It can be structured or unstructured. In structured observation the observer looks for and records specific action. But in case of unstructured method, the observer is in a situation to observe whatever might be pertinent at the time

We have observed the working process of Education board several times. Our observations were natural, direct, obtrusive and unstructured. Our observations are given below-

- 1. During our observation we have found the employees very much busy as JSC exam was going on. There was too much pressure to handle all the exam scripts. As we know the exam scripts are sent to the board from the exam center and board distribute these scripts to the examiners. Examiners are selected before and given message from the board to collect the scripts. They are given a date earlier. So that they can visit board and collect the scripts. A meeting is arranged with the examiners where the board chairman gives a briefing about checking the exam scripts. The examiners are also provided with the answer scripts. We know, Rajshahi board needs to manage a lot of students every year. So it is a tough process to distribute the exam scripts smoothly and very fast. The process of distributing the exam scripts was slow as there were not enough people to handle a lot of scripts.
- 2. We also observed some technical resources are available on the education board. But the number of the computer resources were not enough. The number of technical employees also were not enough to handle the system properly. The board does not have own machines to evaluate OMR sheets and hence they completely depend on third party about this OMR checking process. The board also does not have the facility to publish the results online by their own. They depend on Teletalk and some other technical companies for this reason.

- **3.** Some other sections like, who provide duplicate and old documents were not that busy. As we know only a few number of students need duplicate certificates or transcripts. Even then the people who are coming to get the services needed to go through a long waiting process. It is only because of the overlapping of these sections with the other important ones. That's why these small processes require more times than expected.
- **4.** During our observation the employees were very helpful and they were giving us information willingly when we told about the reason of observation. Most of the people were active enough but pace of their working might be little better. The chairman of the board was so much proud about the result of Rajshahi of the previous year and was willing to keep that constant in the next year.

3.2.3 Face to face question answer session

The interview is a face-to-face interpersonal role situation in which a person called the interviewer asks a person being interviewed questions designed to gather information about a problem area. The interview is the oldest and most often used device for gathering information in systems work. It has qualities that behavioral and on-site observations do not possesses. It can be used for two main purposes: 1) It serves as an exploratory device to identify relations or verify information, and 2) It is used to capture information.

To analyze the system of Rajshahi Education Board, interview of several employees was taken. Among them, there was the Chairman of the board, secretary of the board, senior system analyst and programmer of the board.

To the Chairman

We met with the chairman of this board and had a great conversation with him. He is a very busy person that's why we asked a few questions to him which are given below:

1. Interviewer: How do you think this organization play role to provide quality education?

Interviewee: The board is determined to provide quality education to the students. We are trying to maintain better standard in question paper and evaluating those. This inspires the students, teachers and guardians to work harder. We are also trying to provide a transparent examination system.

2. Interviewer: Do you think you have enough manpower?

Interviewee: No. Till now we are facing some problems in tasks like digitalization of our data need more skilled manpower.

3. Interviewer: Are you satisfied with the result of this board?

Interviewee: Yes. We are improving every year. In recent years we have become the board with highest percentage of passed students several times.

4. Interviewer: Do you have enough resource like budget, technical support?

Interviewee: No. But we are trying our best to utilize our limited resource.

5. Interviewer: Do you think your organization is corruption free?

Interviewee: Yes. We are determined to provide a corruption free service to the nation.

To the Secretary

We met the secretary of Rajshahi education board too. He cordially answered our queries which are presented below:

6. Interviewer: Who takes important decisions?

Interviewee: The board has respective committee to take decisions on different matters like budget, examination etc. But if any emergency situation arises, the Chairman has a special privilege to take decisions alone.

7. Interviewer: Do people receive service timely?

Interviewee: We try our best. But we have lack in manpower as well as there are some certain procedures to be maintained to provide which may lead to some unwanted delay. But in recent times we successfully lessened this delay to a very low level.

8. Interviewer: Is this organization completely digitalized?

Interviewee: No. But we are approaching to do so.

9. Interviewer: Are examiners satisfied with the gratuity provided to them from board?

Interviewee: I think so.

10. Interviewer: Does bureaucratic delay stands as problem for this organization?

Interviewee: Sometimes. You know as a government organization we have to maintain some protocols. We have to cooperate with other government organizations for various reasons. This may cause this sometimes but we try our best to reduce this.

To the Analyst:

In the full information gathering process, the senior system analyst of board helped us whole heartedly. He gave us a lot of time. He helped us to understand the overall process going on inside the education board and answered our queries which are given below:

11. Interviewer: Do you depend on 3rd party organizations?

Interviewee: Yes.

12. Interviewer: For which reasons?

Interviewee: To prepare examination sheets, encode them, preparation and evaluation of OMR sheets.

13. Interviewer: Does this hamper confidentiality of data?

Interviewee: No. The method they use is almost impossible to break.

14. Interviewer: Does this board have own examination centers?

Interviewee: No.

15. Interviewer: Do examiners get enough time to evaluate answer scripts?

Interviewee: Yes. But we are trying to improve the quality of evaluation of answer scripts by increase number of examiners.

16. Interviewer: You have to maintain a large amount of data here. Are they kept with enough security?

Interviewee: Yes. We maintain certain protocol to provide security.

17. Interviewer: Does the board provide training to teachers?

Interviewee: No. It's the concern of the ministry of education.

18. Interviewer: Is the environment of this organization helpful enough to persons who come to receive service?

Interviewee: Yes.

19. Interviewer: You work on the admission of college. Does the system have enough acceptance to people? We heard people complaining about the system in recent times.

Interviewee: We are acknowledged about the complaints. The system is still new. We are trying to make it acceptable.

20. Interviewer: What's your opinion on question out issue?

Interviewee: Most of the time, it's a rumor. Yes, there are some occurrences. But the board has a little authority over the examination process. Ministry of education, local administration and other organizations have involvement here. It's not easy to do alone for us.

21. Interviewer: Do you feel the need for more analysts here?

Interviewee: Yes.

22. Interviewer: Is cheating in examination still a problem in public examinations?

Interviewee: No. We successfully took down this anomaly.

23. Interviewer: In case of losing data like transcript, registration card etc. or affidavit, how fast the board can process requests?

Interviewee: Satisfactory delay. Having applications from clients we process the request as soon as possible.

24. Interviewer: Have you established online payment system for teachers?

Interviewee: No. But we are working on it.

25. Interviewer: How much time do you need to do that?

Interviewee: We want to do that within 2 years.

To the programmer

Programmer is a very important person in board. We asked him a lot of questions and those are given below:

26. Interviewer: Do you have own server?

Interviewee: No.

27. Interviewer: Then how do you publish results online?

Interviewee: We use the server from Teletalk.

28. Interviewer: Do you have any system to convert the analog data from previous year to digital format?

Interviewee: Till now, no. But we are working on that. We hope to accomplish this within few years.

29. Interviewer: Do you think the website of this organization sufficient enough to get services?

Interviewee: We improved a lot recently but there are a lot to work on. We are working on giving more information to the website.

30. Interviewer: Do you have enough manpower here to handle technical site of this organization?

Interviewee: No.

31. Interviewer: Do your encryption system to hide identity of an examiner strong enough?

Interviewee: Yes. It's a very effective and tested method.

32. Interviewer: What do you do if any problem arises?

Interviewee: We do those processes manually.

33. Interviewer: You depend on 3rd party organizations to do this task. Why don't you do this here?

Interviewee: We are not technically sound enough till now. Meanwhile these organizations have provided a very satisfactory service to us. We don't have an updated system which can be handles easily. Till now we have to rely on a DOS operating system based system which is not possible to handle without skilled manpower. We are trying to implement a better system but it will take time.

- **34. Interviewer:** Do the 3rd party organizations protect the confidentiality of your data? **Interviewee:** Yes. They are totally aware of that.
- **35. Interviewer:** You have to deal with a lot of data here. Do you think you can manage it properly if the system goes digital? In present times, data security has become a concern. **Interviewee:** We are taking necessary steps to ensure that. Until we can be satisfied, we are not risking anything.
- **36. Interviewer:** Do you take any technical assistance or advice from technical educational institutions like BUET or RUET?

Interviewee: Not much. We had some assistance to prepare this examination system from BUET. But we think we should ask for more assistance.

37. Interviewer: You are a programmer. Do you feel the necessity of having more skilled programmers here?

Interviewee: Of course. As many as we get those type of skilled personnel here, we can give better service to nation.

- 38. Interviewer: If you provide services online, educational institutions under this board may need technically skilled enough people to receive that service. Do they have them?
 Interviewee: No. But we are trying to train more people to increase the amount of people with technical knowledge.
- **39. Interviewer:** What are the main obstacles you face here to handle technical issues? **Interviewee:** Till now we don't have enough manpower as well as updated technology. Budget sometimes seems a problem since we are a government organization we have to maintain some protocols. But government is trying to provide us these support now. It will take time but we hope to overcome these difficulties.
- **40. Interviewer:** Within how many years do you think this organization will be digitized? **Interviewee:** Hard to tell. Till now a lot to do. But we hope to do so within next five years.

3.2.4 Information collected by opinion poll

This is also known as questionnaire. Questionnaire is an effective alternative of interview. If answer of the same questions is required from many people questionnaire is better than interview. It has several advantages over interview. In many cases it is economical and it requires less skills to get information. Also, many respondents feel better to answer the question in questionnaires rather than interview. We have also collected some information from the education board by using this technique. The form of the questionnaires is given below.

Questionnaires for information gathering on Board of Intermediate and Secondary Education, Rajshahi.
Are you satisfied enough about the result of the Rajshahi Education Board? □ Yes □ NO
 Do you think, you have complete control over the result publication? ☐ Yes ☐ NO
 3. Do you provide all possible facilities over online? ☐ Yes ☐ NO
 4. Do you think, the money you provide to evaluate each script need to increase? ☐ Yes ☐ NO
 5. Do you think your system is enough digitized? ☐ Yes ☐ No
6.If you think no, within how many years all the documentations can be digitized ?(Optional) 5 Years 10 Years 15 Years More than 15 Years
7. What do you think as the main obstacle to provide proper service from education board? ☐ Lack of man power ☐ Increasing number of students ☐ Technical difficulties ☐ Lack of enough time

Figure 3.2.4(a) Questionnaires form

	S.What do you think the main reason behind question out? It just a rumor BG press Corruption on board employees Not having enough control over question							
	9.How much control do you have over the examination center? Low Medium High No-control							
		-	-	eed of resu	-	ng system?(Out of 5)		
11. How will you rate the skills of the employee? O 1 O 2 O 3 O 4 O 5 12. How will you rate the transparency of the organization?								
		-		04				

Figure 3.2.4(b) Questionnaires form

The questionnaire forms were distributed among 10 employees of the education board. The collected results are given below:

Table 3.1 Result of yes/no questions.

Ques no.	YES	NO
1	10	0
2	6	4
3	4	6
4	7	3
5	2	8

Question no. 06: 5 years (25%), 10 years (75%).

Question no. 07: Lack of manpower (25%), increasing number of students (25%), technical difficulties (40%) and lack of time (10%).

Question no. 08: It just a rumor (40%), BG press (10%), Corruption on board employees (10%), Not having enough control over question (40%).

Question no. 09: Low (20%), medium (60%), High (20%).

Question no. 10: 3 (60%), 4 (40%).

Question no. 11: 3 (50%), 4 (50%).

Question no. 12: 3 (40%), 4 (50%), 5(10%).

3.3 Overview of the existing examination control system of Rajshahi education board

Overview of an existing system can be shown by data flow diagram. The Data flow diagram (DFD) was first developed by Larry Constantine as a way of expressing system requirements in a graphical form; this led to a modular design. A DFD, also known as a "bubble chart", has the purpose of clarifying system requirements and identifying major transformations that will become programs in system design. So it is the starting point of the design phase that functionally decomposes the requirements specifications down to lowest level of detail. A DFD consists of a series of bubbles joined by lines. The bubble represent data transformations and the line represents data flows in the system.

The DFD of Rajshahi education board is shown in figure 3.3.

Overview of existing examination control system

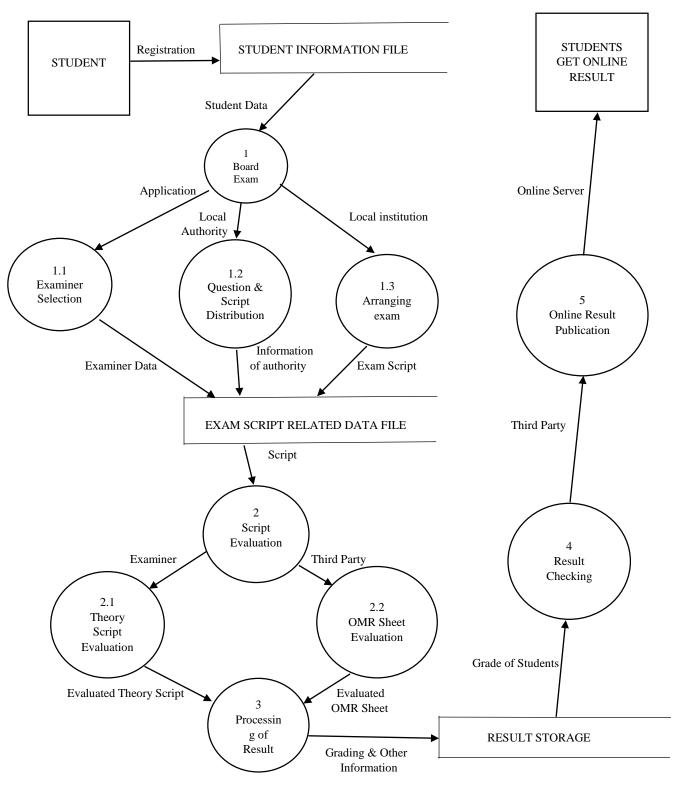


Figure 3.3 Data flow diagram showing examination process of Board of Intermediate and Secondary Education, Rajshahi.

3.3.1 A brief description of existing examination control system

We have shown the examination control system of the education board. The process starts with the students. Students are the source of the system. They complete the registration process through their institution. The institution send the respective information of their students to the board. These information are very important and confidential. Education board stores these information in their database with care. They also check and double check the stored information. If any information is missing then corresponding school or college is informed to resend the information about the particular student.

Then the first process of examination starts through the transmission of the student data.

Then this process of board exam completes through three sub processes which are examiner selection, question and exam script distribution and arranging examination. The first sub process is examiner selection which starts through application. Board issues a notice about selection of examiners and there they ask the interested teachers to apply to board. The interested teachers apply to the board to be examiner. Then board select eligible examiner from the applicants. Then the next sub process is question and exam script distribution which works through local authority. Board sends the question and exam script to the district commissioner's office. From there the questions and the exam scripts are distributed to different exam centers. Finally the arranging examination process completes with the help of local institutions. The institutions selected as exam centers selects invigilators, prepare seat plan, collects seat benches if they have shortage of seat benches.

The documents of examiner selection process and arranging examination process are stored in data file.

The next process is to evaluate the answer scripts. This process is divided into two sub processes. They are theory script evaluation and multiple choice OMR sheet evaluation. The theory scripts are distributed to the selected examiners. The examiners are given deadline within that deadline they have to complete their evaluation. After evaluation of the exam scripts they submit the mark sheet and the exam scripts to the head examiner and then the head examiner submit the final mark sheet to the board. The OMR sheet checking process is done by the third party organization. Board selects these third party organization.

After getting the evaluated theory script marks and multiple choice answer marks the third process of creating final result starts. This process ends with storing the result and grade the result.

Next process is to check the stored result. The result is stored in data file after getting the marks from the examiners and the OMR sheet evaluators. Then corresponding graded result is checked in this process that whether there is any mistake or not.

Then the processed and checked result is given to third party like teletalk to publish it online. Through the publication of result overall examination control process ends.

Lastly the students get their result through the online server of the third party organization.

3.4 Conclusion

Information gathering is an art and a science. A key point of feasibility study is gathering information about the present system. That's why to gather information we have used four tools. That means we collected the required information using four different criteria. These tools are very useful because the information can be collected by using these tools very effectively. System can be observed closely and at the same time this is an opportunity to build up an amicable relationship with the staffs of the respective organization. By gathering information using the four tools we have mentioned we came to know the actual need of the organization. It will help us in our analysis about the present system. Lastly we sketched a data flow diagram which is a graphical representation of the existing system of Rajshahi education board. By data flow diagram one can easily understand the prevailing system of education board. So the importance of all the tools above discussed are enormous.