A Case Study

HIGHLY-URBANIZED ILOILO CITY HIT BY MASSIVE TRANSMISSION FAILURES

"You need to wait for the other precinct to finish. Then in another precinct, there would be a delay of two hours, so you need to wait again. You cannot transmit because the other precinct needs the modem. We only have one modem and one technician." (BEI from Sambag Elementary School, Iloilo City)

Introduction

The Automated Election Law or RA 9369, which authorizes the COMELEC to undertake the very first nationwide automated elections in the history of the country, was a response to the popular clamor for clean, credible and honest elections. The clamor grew louder on the heels of a 2004 election marred in allegations of fraud against then President Gloria Macapagal-Arroyo in connivance with some officials from the COMELEC, armed forces, and police. There was a common perception at that time that automating the voting system would prevent the recurrence of another "Hello Garci"[1].

Additionally, the automated election was also seen as the better alternative in terms of speed compared to manual system, which in the past had taken up to 40 days before a winner for a national position is proclaimed. For last May's election, COMELEC declared that the winners, including the presidency and vice presidency, will be proclaimed in two to three days[2]. In fact, as early as last year, Smartmatic Asia Pacific President Cesar Flores said that "*over 90 percent*" of the election results will be in "*within the first six hours after closing time*." Election returns would be transmitted by cellular phone, landline or satellite at the end of voting hours. "*From that point on, there'll be no more human intervention*,"[3] he added. These declarations, in the context of a general frustration with systemic electoral cheating, encouraged an optimism among many Filipinos who entertained high hopes for the then approaching election.

The Election Day experience in Iloilo City, however, depicts the opposite of what COMELEC and Smartmatic had promised and the people had hoped for. This was evident in the extensive failure to electronically transmit election returns in a big city that is supposed to have a strong telecommunications infrastructure. Of the 344 precincts, only 76 precincts or 22 percent were able to electronically transmit their results to the Iloilo City canvassing center. The rest of the CF cards had to be hand delivered.

Methodology

To find out what really happened on Election Day in Iloilo City, the Project 3030 Research team undertook a case study of the election experiences in the city. Field research was done in the city from June 27 to June 30, 2010. With the assistance of the regional coordinator, Project 3030 Research interviewed city and provincial COMELEC personnel. Also interviewed was a city canvassing personnel, who happens to be a professional in the information and communications technology (ICT) field, to get a firsthand account and technical analysis of what transpired during canvassing.

Two focus group discussions (FGDs) were conducted with poll watchers and voters. Key informant interviews (KIIs) were done with specific members of the Board of Election Inspectors (BEIs), all of whom had served in previous elections. Poll watchers and voters, who were selected as key informants based on their knowledge of the issues at the precinct level, were also interviewed. Other key informants were a victorious local politician who shared his observations and overall appraisal of the automation project and a Department of Science and Technology (DOST) official who provided information on the role/s of DOST in BEI certification and the reconfiguration of CF cards[4].

In the course of our field research, we collected election documents that included canvassing print logs, inventories, and election returns, among others. All data were later consolidated and organized based on emerging themes and subthemes.

Table 1. Data collection methods and data sources

Methods	Respondents/participants
FGD	Selected voters
	Selected poll watchers
KII	Selected city and provincial COMELEC personnel
	A City canvassing personnel
	Selected BEI members
	Selected poll watchers and voters
	A local politician
	A DOST official
Examination of records, documents	Canvassing print logs, inventories, election returns, PCOS technician's manual, PCOS operator's manual, CCS operator's manual, poll watchers' checklists, bill of lading of ballots delivery, COMELEC resolutions, list of precincts that hand delivered CF cards, local news articles, photos

Study Objectives

The goal of the study is to gain an in depth and holistic understanding of the conduct of election in Iloilo City by piecing together the different information and stories from the ground from people who had close knowledge of the questions being examined.

The specific objectives of the case study are:

1. To validate the Election Day incident reports submitted to the Project 3030 monitoring site;
2. To form a holistic picture of the experience of Iloilo City of the first ever automated elections;
3. To investigate the widespread transmission failure of election returns from the precinct-level precinct count optical scan (PCOS) machines to the Consolidation Canvassing System (CCS) in the city canvassing center;
4. For the case study to serve as a reference in the drafting of recommendations for the improvement of the next elections.

ABOUT ILOILO CITY

Iloilo City, the capital of Iloilo province, is a sprawling highly-urbanized city of 418,710 residents, with an annual 2 percent growth rate.[5] Considered as the gateway to Western Visayas because of its strategic location, the city has a total land area of 56 square kilometres. It has an international airport and a seaport.[6] The city is politically subdivided into six districts and 180 barangays. These districts used to be separate towns that were merged together in 1937 after Iloilo City gained cityhood status. The people speak Hiligaynon, often also referred to as Ilonggo.

Table 2: Iloilo City Political Subdivisions

DISTRICT	NO. OF BARANGAYS
Arevalo	13 barangays
City Proper	45 barangays
Jaro	42 barangays
La Paz	37 barangays
Mandurriao	18 barangays
Molo	25 barangays

Source: http://en.wikipedia.org/wiki/Iloilo_City

Iloilo City takes pride for its major industries: banking and finance, retail trading and customer service. There are thirty colleges and universities[7], among them the University of the Philippines - Visayas and West Visayas State University. The labor force participation rate (LFPR) was recorded at 66 percent in April 2003.[8] As of December 2007, there was a total of 8,407 business establishments, which brought a cumulative capital investment worth Php 13.02 billion in 2003 alone.[9]

One of the main attractions for investor confidence is the presence of an advanced telecommunications infrastructure. Communication services include telephone and internet services. The three telephone providers are PLDT, INNOVE and BayanTel, all of which can provide fiber optic, copper and microwave T1 and E1 lines. Cellular phone facilities in the city are SMART Communications, Globe and Sun Cellular.[10]

Politics

Iloilo City politics is not much different from the rest of the province or the rest of the country. Iloilo province has been ruled by a few political dynasties for the past decades. And they have since dominated the elections, a political exercise that has evolved into a competition for key governmental posts among the families such as the Gonzales, Tupas, Garins, Syjucos, Defensors and Birons. Political observers noted that the May election was an opportunity for neophytes to enter, if not break these families' tight grip on politics[11]. Former mayor Jerry Trenas, who split from the camp of Raul Gonzales, Sr. and defected to the Nacionalista Party last year, and former vice mayor Jed Mabilog, were regarded by some observers as leaders who have the potential to change the face of Iloilo City politics[12]. It is in this city's economic and political landscape that the very first nationwide automation of the election was held.

The Automation of Elections in Iloilo City

This section of the report presents the findings from the FGD, KII and document analysis.

Project of Precincts

The city's 242,033 registered voters were assigned to the 344 clustered precincts located in 68 schools or voting centers. Iloilo City is so big that it has twice the number of precincts of the whole of Biliran, the smallest province in the country. The old precincts in manual elections with 200 to 500 registered voters were merged to form one precinct with a maximum of 1,000 voters. Corresponding to the number of precincts, 344 PCOS machines were allotted to the city.

Table 3: Project of Precincts

Total No. of Barangays	180
Total No. of Established Precincts	1,674
Total No. of Registered Voters	242,033
Total No. of Clustered Precincts	344
Total No. of Voting Centers	68

Source: Project of Precincts for the 2010 Elections, Commission on Elections

PRE-ELECTION PREPARATIONS

Because the nationwide automation of the election is a first in the country and is very different from previous elections, the preparations required are more complex and take more time. Based on the experiences from other countries, an automation project usually takes years to prepare. This would sometimes include a dry run of the chosen system in non-electoral exercises to assess the security and accuracy of the system and its suitability to the area before it is used in an election. With our own automated election system (AES) claimed by some as the single biggest automation project in the world, we can just imagine the scale of preparations that needed to be done.

Among the pre-election preparations are: a nationwide site survey; voters' education campaign; training of poll workers and technicians; storage and deliveries; and testing of the machines.

Smartmatic Site Survey

Last December 2009, Smartmatic carried out a site survey that was intended to identify areas in the country with weak telecommunication signals. This served as the basis for the provision of more sophisticated transmission devices such as the Broadband Global Area Network (BGAN) or Very Small Aperture Terminal (VSAT). But on January 14, the target date for the completion of the survey, Smartmatic announced that they were able to finish only 93 percent of the target areas[13].

In the case of Iloilo City, COMELEC had no role in the site survey except to furnish Smartmatic the project of precincts on which Smartmatic based its survey. COMELEC somehow learned from the survey that the whole of Iloilo province has reliable telecommunications facilities even though for some reason it was not provided a copy of the report. But some of our respondents expressed doubts over the accuracy of this survey, pointing to the failure of electronic transmission that happened as indicative of the doubtful accuracy of such survey. The survey finding that the whole province has reliable telecommunications facilities was the basis for the non provision of a BGAN or VSAT beforehand.

Voters' Education

It took three and a half days for the City COMELEC to finish its voters' education campaign and PCOS road show in all districts, but not all of the 180 barangays were reached. Each education session took an average of three hours. This constituted of a Power Point and video presentation and explanations on how the automated elections differ from manual elections and instructions on how to accomplish the ballot. There was also a PCOS demo[14], open forum and an exercise on ballot shading. Voters' guides were also handed out.

The city COMELEC also worked alongside the Parish Pastoral Council for Responsible Voting (PPCRV) in their own information dissemination campaign and served as resource persons and supplier of materials such as sample ballots. Political parties, which were given prior AES orientation by COMELEC, likewise organized their own information dissemination and poll watchers' training.

The major impediment to the education campaign was the lack of funds for the first months of its operations. The full budgetary allocation arrived only in March 2010, three months before election. The city COMELEC had to use money from their own pockets for the October to December 2009 expenses. Budget

constraints also brought logistics problems. For example, the COMELEC didn't have its own vehicle for use in road shows. They also didn't have an LCD projector and often had to borrow from schools and non-government organizations (NGOs).

Training of Poll Workers

The three-day training of BEIs held in April 2010 in Sarabia Hotel was for ten batches with 40 BEIs (chairman and poll clerk) per batch. That brings the total to 400 BEIs who served in the city this 2010 election. A refresher session that was also attended by the third members was held on the same month. Only COMELEC and the DOST had a direct involvement in the training. COMELEC personnel served as trainers and managed the training, while DOST was the certification body.

Two types of certification examinations were developed by the DOST for the BEIs. The first is a one-hour, 40-item exam. Those who failed were allowed a retake. On the other hand, the second - a practical exam - was given only once. In this exam, the BEIs had to accomplish a checklist of 10 specific tasks on the PCOS machine. Of the 400 BEIs in the city, 15 failed the exams. The passing rate for the whole region was 97 percent.

Appointment papers[15] were handed out to the BEIs at the end of the training. They were given Php 2,000 for training allowance and Php 4,300 for their Election Day service. One BEI member complained that the compensation is not commensurate to the tasks that they had to perform, saying, *"I hope that we get additional compensation because the Php 4,300 was not worth the exhaustion and lack of sleep." ("Sana mabigyan ng dagdag na sahod. Yung pagod at yung puyat, yung Php 4,300 na binayad hindi sapat.")*

Training of Smartmatic Technicians

The hiring and training of technicians was the responsibility of the winning bidder, Smartmatic, who opted to subcontract it to a third party, Ventures Link Incorporated. Election officials said that many disadvantages arose from this set-up, especially with respect to the accountability of the third party to COMELEC. For instance, only Smartmatic and Ventures Link have binding agreements over the terms and conditions and deliverables of technicians. And, according to a COMELEC personnel, they didn't have a direct role or influence on their hiring and training.

In Iloilo province, nine technicians resigned from their job on the lead up to the elections. They were believed to have resigned because of the distance of their polling center assignments and lack of compensation, grievances shared by other technicians. A provincial COMELEC personnel said that they had to take the initiative and took them under their care[16]. On Election Day, it was the election officers who provided them with food and transportation. Another election official thinks it is possible that some technicians who were given early training were later hired by politicians. And Smartmatic wasn't able to do anything about it for lack of a binding contract.

COMELEC and Smartmatic Coordination

Our informants from the COMELEC said that coordination with Smartmatic was largely dependent on a single communication line. COMELEC didn't know the location of Smartmatic's office in the city, if they had one. All they have was the contact number of the personnel in charge. A ranking COMELEC official observed that Smartmatic has a tendency to be too centralized in its operations in the sense that COMELEC was always uninformed about the delivery schedules, location of storage, among others. However, the filtering of information shared with COMELEC may be one of Smartmatic's security measures this elections, according to our informants.

Storage and Deliveries

All ballots for Iloilo City left Manila on the 29th of April and arrived in Iloilo the following day. The official carrier of the ballots for the 2010 elections was logistics giant, Air 21. There were 344 total packages, one for each clustered precinct. It was valued at Php 14.1 million and received by City Treasurer Katherine Tingson.

They were stored in the City Treasurer's Office and retrieved by the members of the BEIs before the May 10 opening of polls. Some of the hitches reported were the late arrival of the ballots and paraphernalia. In one precinct, for example, they were scheduled to arrive on May 9 between 10 p.m. and 12 a.m. of May 10, but they arrived at around 2 a.m. of May 10. This caused much inconvenience to the BEIs who had to serve the whole day of May 10.

The PCOS were secured either in the school principal's office or inside the precincts. The contingency PCOS were all stored in the city COMELEC office. There were no major incidents reported during the machine storage and deliveries in the city that is cause for much alarm. Most of those reported, such as the burning of five PCOS machines intended for five barangays in Miag-ao on May 8, were in other parts of the province.

Problems encountered in the deliveries in the provincial level were largely due to poor road infrastructure. The machines and paraphernalia sometimes had to be carried in a hammock or tied to a horse, according to a provincial COMELEC personnel. She said, "*It is very embarrassing to go high tech if we don't even have roads. They need to fix the telecommunication facilities first before automating the elections*" ("*Nakakahiya na maghigh tech tayo walang mga kalsada. Ayusin muna nila mga telecommunication facilities bago mag-automate.*") The PCOS machines were guarded by PNP escorts and PPCRV poll watchers during storage and delivery.

Final Testing and Sealing (FTS)

The Final Testing and Sealing (FTS) of PCOS machines was originally scheduled three to seven days before Election Day based on the Terms of Reference[17] for the AES bidding. This was, however, rescheduled after it was discovered on May 3 that the CF cards were wrongly configured and all FTS were postponed to give time for the reconfiguration of CF cards. FTS for Iloilo City was conducted on the 9th instead, a day before Election Day. There were no significant findings during the FTS, but the problem with the CF cards created fear among some politicians that this might be linked to a grand design for failure of elections, one of them said.

CF Card Reconfiguration on Election Day

The recalled CF cards were reconfigured either in Smartmatic's main warehouse in Cabuyao, Laguna or in the provincial DOST offices. They were later delivered back to the precincts or the city COMELEC office on May 9, right before the conduct of FTS. However, on Election Day, there were CF cards that still turned out to be defective, one of which was in Brgy. Mabini-Burgos. The precincts pulled out this CF card and voting was still continued until 7 p.m. But instead of feeding the ballots in the machines, the voters were instructed to feed them in the ballot box. The ballot box was later deposited to the City COMELEC office. When the reconfigured CF card was delivered on May 11, the ballot box was brought back to the precinct and only then were the feeding of ballots and transmission of results done .

ELECTION DAY EXPERIENCE

Queuing

A common sight on Election Day throughout the country was the long lines of voters enduring the heat of the sun or, in some places, being soaked in the rain for their chance to cast their votes. In one precinct in Iloilo City, a BEI member said that queuing took three to four hours and that there were disgruntled voters who eventually went home. There was a "stampede" in the precinct of one poll watcher because of the absence of an orderly queue. It was observed by the poll watchers that the long lines happened not in the feeding of ballots in the machines but during registration and ballot distribution. Further delaying the process were technical problems.

A city COMELEC official admitted that the BEI members were left to their own wits on Election Day in managing the flow of voters, which led to a lack of a uniform voter flow management scheme. To illustrate,

there were BEI members who made ten voters vote at a time and there were those who made them vote five at a time. Some BEIs and support staff handed out priority numbers, while some didn't.

A BEI complained that they didn't have time for bathroom breaks because of the long queues. She served from early morning of May 10 until 5 a.m. of May 11. Another served from 1 a.m. of May 10 to 6 a.m. of May 11.

> *"The allotted time of 7 a.m. to 6 p.m., which was moved to 7:00pm, was insufficient. Us, BEIs, did not have time for snacks or breaks because there was no let-up in the arrival of voters. And they'll get angry at you if you don't accommodate them." ("Yung allotted time na 7:00 to 6:00 tapos minove ng 7:00, hindi kasya. Tapos kaming mga BEIs hindi na kami makapag-take time to have our snacks, to have our break kasi sunod-sunod yung mga botante. Kapag hindi mo inentertain, nagagalit naman sila.")*

> - Mandurriao High School BEI

> *"You could barely eat, couldn't sleep for two days and two nights. We couldn't stand, couldn't breathe. I thought I would collapse that day." ("Halos hindi ka na makakain, hindi makatulog for two days and two nights...Hindi kami makatayo. Hindi kami maka-inhale exhale. Akala ko nung araw na yun magcocollapse ako.")*

> - Sambag Elementary School BEI

The local COMELEC official blamed the new precinct clustering. He suggested that next time, the number of voters per precinct be reduced to not more than 500. Another respondent suggested to have counting centers so as to lessen the amount of machines needed and minimize costs. Several respondents agreed that it would be better to retain precinct voting, but counting should still be centralized.

Problems with Election Paraphernalia

a. Ballot Secrecy Folders

The supplier of folders was awarded by COMELEC to Printwell, Inc. on May 7 after the expose on the overpriced OTC Paper Supply's folders. They were overpriced by Php 380 each. The Printwell, Inc. folders have the size of ordinary long folders and cost Php 7.48 each. They were supposed to bear the official COMELEC seal. However, many of those used on Election Day were ordinary folders that can be bought in the nearest bookstore and were not stamped with COMELEC seals. They were also too short for the ballots, which could compromise ballot secrecy.

Voting in secret is a key election principle which is enshrined in the Universal Declaration of Human Rights, Article 21:

> *"The will of the people shall be the basis of the authority of government; this shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and **shall be held by secret vote** or by equivalent free voting procedures."* [Emphasis supplied]

b. UV Lamps

All poll watchers working with Project 3030 in Iloilo City that monitored the polls in about 200 clustered precincts said that the BEIs mistook the UV lamps for flashlights. In fact, a COMELEC personnel said that there was no BEI orientation on how to use UV lamps, and he doubts whether these were even used at all. In La Paz High School, the BEIs confessed that they didn't know what the UV marks[18] in the ballots look like. It was the same scenario in Mandurriao and Montes II. A Montes II BEI said, *"We were not informed. In fact, we thought they were flashlights in case there was a blackout" ("Hindi kami nainform. Akala ko nga flashlight yun eh, in case magbrownout".)* Each UV lamp, which was provided by Philand Industries Incorporated, costs Php 350[19]. They arrived two to three days before Election Day.

c. *Felt Mark Pens*

A focus group discussion with voters and poll watchers revealed that voters also had problems with the felt mark pens. Too much ink resulted in marks seeping through the other side of the ballot. As a result, voters have no way of knowing whether their votes were indeed counted as they intended because of the blotting/smudging. A voter from Sinikway related how ballots were also rejected because of this. "*Some ballots were invalidated because the marks seeped through the ballot. It will be rejected with just a slight error. There were those who complained, three of them in our precinct.*" ("*Pag shinade yung ibang ballot, bumabakat, naiinvalid yung iba. Konting diperensya lang niluluwa na. Merong mga nagreklamo. Sa aming presinto siguro mga tatlo sila*")

d. *Batteries*

Although there were no reported problems on Election Day involving the PCOS machines' batteries, it is important to mention that the guaranteed backup power supply for the machines was not provided for by Smartmatic. The COMELEC provincial personnel said that some PCOS machines didn't have backup batteries, and those with batteries had lasted for only two to eight hours. This belied Smartmatic's claim that if blackouts would happen on Election Day, this wouldn't be a problem because backup batteries can last for up to 32 hours.

Problems with Ballots

A BEI from Sambag Elementary School said, "*Many had difficulty shading the ballots, especially the older voters.*" ("*Maraming nahirapan sa pagshade ng ballots, especially matatanda*"). They said that the oblongs and instructions were too small. It was also difficult for them to keep their votes secret because the ballots were too long.

Ballot Rejection

In La Paz district, a BEI decided to wipe the ballots with a small towel, edit the marks that were not dark enough, and tried to re-feed them in the machine. She did this after voting was closed and while waiting for the arrival of a detainee's ballot[20]. The PCOS machine accepted four out of the six rejected ballots. Although the BEI violated election protocols, this case illustrates some problems with the machine which could have resulted in the disenfranchisement of voters.

PCOS Problems

The most common problem involving the PCOS machines were simple paper jams that were eventually resolved by the BEIs or technicians, according to a COMELEC personnel. In fact, many of the PCOS problems encountered on May 10 were eventually resolved and only two PCOS machines had to be replaced.

Disenfranchised Prisoners

It was in the 2010 elections when detainees were allowed to exercise their right to suffrage, as laid down by Comelec Resolution No. 8811 or *The Rules and Regulations on Detainee Voting*[21]. But this was not ensured in at least one case in Iloilo City. In Montes II, the ballots of the detainees assigned to the precinct hadn't arrived by 8 p.m., one hour after the official closing of polls. The BEIs then decided to continue the closing of polls and transmission of results, without waiting for these ballots, consequently disenfranchising four prisoners.

Transmission

Canvassing in the city was assigned one of the transmission servers that will receive the precinct-level election returns. The other servers include the COMELEC central server and KBP/PPCRV/Dominant Minority/Dominant Majority Parties server. All the election results sent to the CCS at city canvassing center were consolidated and sent to the provincial canvassing center. All precinct-level transmissions in the city used modems.

The Iloilo City canvassing of votes was done in the Social Hall of the city's Department of Education. On May 10, at 10 a.m., the Board of Canvassers (BOCs) and CCS operator started setting up the canvassing unit. They officially convened by 12 p.m. However, they had to wait for hours for the arrival of results because the closing of polls in the precincts was set not earlier than 7 p.m. An hour prior to closing of polls the CCS (consolidation canvassing system) was officially initialized by the CCS operator. The heavy influx of electronically transmitted election results came between 8 p.m. and 10 p.m.

Transmission Failures

Below are sample cases of Iloilo City precincts that had to hand-deliver their CF cards containing the election returns because of transmission failure.

In La Paz district, the BEI narrated that the transmission of results in her precinct started late because despite the closing of polls at 9 p.m., they had to wait for the detainees' ballots from the Bureau of Jail Management and Penology (BJMP). The ballots arrived at 1:30 a.m. of May 11. The first attempt to transmit the election returns was made around 2 a.m. of May 11, a downtime in transmission, according to a canvassing personnel. There were other problems. Aside from the slow transmission rate[22], the transmission would also suddenly reset right in the middle of sending the election returns. For example, while the transmission was already at 70 percent complete, it would suddenly go back to 0 percent transmission. Finally, at around 3 a.m., after making 20 attempts of sending the results, a Smartmatic personnel instructed them to just personally bring the CF card to canvassing.

Another precinct attempted transmission of election returns from 8 p.m. to 12 a.m., with the modem shared by four precincts, after which they were also instructed to hand-deliver the CF cards. The BEI from Sambag Elementary School narrated how modem sharing was done. "*You need to wait for the other precinct to finish. Then in another precinct, there would be a delay of two hours, so you need to wait again. You cannot transmit because the other precinct needs the modem. We only have one modem and one technician.*" ("*Kailangan mo hintayin yung isang presinto. Sa isang presinto madedelay ng two hours, so wait na naman kami dun. Hindi mo maitransmit kasi paulit-ulit kasing hinihiram sa kabila. Isa lang yung modem, isa lang yung technician*") In Mandurriao, the BEIs had difficulty in transmitting the results. The absence of a signal cannot be the reason for the transmission problem because there was signal from Globe and Smart as the BEIs themselves were texting using their phones during the elections.

What could have brought about this widespread transmission failure? The following are possible reasons suggested by our respondents:

1. Weak signal
2. Possible clogging of transmission lines because of simultaneous transmissions
3. Defective modems
4. Modem sharing - Because the BEIs were not told that there will be a limited number of modems, there were no appropriate mechanisms and clear procedures set in place to prevent long delays
5. Some might have decided not to wait any longer for their turn to use the modems and just personally brought the CF cards containing the election returns to the canvassing center.

Security during Delivery of CF Cards

CF cards were sealed in a small envelope before they were delivered to the canvassing center. The chairman and poll clerk were the ones who brought them to the Social Hall at Department of Education (DepEd) city office, while the ballots remained in the precinct in the custody of the third member. The ballots were later picked up by a personnel from the Treasurer's Office. In Mandurriao, the CF card delivery happened on May 11, 5 a.m. The BEIs took a tricycle and had no police escort. In another precinct, there were no more poll watchers by the time the three BEIs of three clustered precincts rode together using their own car. The poll watchers left the precinct after the election returns had been printed. They too had no police

escort. In a precinct in La Paz, the BEIs took a taxi at 4 a.m. and reached the canvassing center at 4:30 a.m. of May 11.

Delivery of FTS Results

Two precincts wrongly sent Final Testing and Sealing (FTS) results instead of Election Day results to the city canvassing center. These were the precincts in Sambag Elementary School in Jaro and Jereos in La Paz district. This case is not unique. The Philippine Center for Investigative Journalism (PCIJ) and GMANews.tv actually found 297 precincts all over the country that delivered FTS results on Election Day[23]. CCS cannot distinguish FTS results from Election Day results and the results cannot be overwritten or corrected in the canvassing level

To address this, COMELEC released a resolution24 on May 12 ordering the retrieval of laptops and CF cards of affected precincts. It mainly put the blame on the BEIs for the error. It said that the BEIs accidentally saved the FTS results in the backup CF cards during the conduct of FTS. These were the same CF cards that were hand-delivered to the canvassing center from precincts that experienced failure of transmission.

A BEI from Sambag Elementary School however maintains that the CF card that they brought came from the main CF card slot[25]. It is also important to note that on the FTS procedures[26], the backup CF cards will only be inserted in the PCOS machine after testing and before sealing the machine. In short, the backup CF cards should not be in the CF card slot during the course of testing, so how is it possible that the FTS results were accidentally saved in these cards?

Following the instructions in COMELEC's resolution, Iloilo City's CCS laptop was brought to Manila for Smartmatic to remove the wrong entries.

Delayed proclamation

The delay in proclamation in Iloilo City was primarily caused by this error. The canvassing threshold is 100 percent, meaning all results must be in before any proclamation is made. So they had to wait for the erroneous results to be fixed in Manila before the Board of Canvassers (BOCs) were finally able to proclaim the winners on May 14.

The official winners in the city were Trenas, who won over Raul Gonzales, Jr. for the lone congressional seat. Gonzales, Jr. had filed an electoral protest in the House of Representatives Electoral Tribunal[27]. Jed Mabilog meanwhile defeated strongest contender Raul Gonzales, Sr. for the mayoralty position by more than 15,000 votes.

Consolidation Canvassing System (CCS) Problems

Below were observations made by a canvassing personnel during the canvassing proceedings:
1. The IP number or machine number was visible in the CCS. He said that this serves as some sort of identifier and should have been hidden from view.
2. The CCS suddenly shut down once during canvassing. He surmised that this could be related to the security tokens and the error message, "missing key", that repeatedly appeared on the screen.
3. There was also a one-hour delay because the CCS was not recognizing the security keys, and a Smartmatic Support Center agent didn't know what to do.
4. The canvassing personnel also said that the May 10 and May 11 activities were not reflected on the canvassing print logs. He thinks that these may have been overwritten after 1,000 log entries. The CCS might have been set to record only until the 1000th activity.
5. His other observations had to do with the design that primarily indicates that the CCS was "vulnerable to human errors" and was "not dummy-proof".

Fraud

a. "Open Ballot" System

Voters from Sinikway revealed that there was a new cheating scheme that they themselves witnessed last May elections called "open ballot". One of the voters explained how the system works: "*They will initially give you Php 500. And if you agree to an 'open ballot', they will pay you an additional Php 300. The voter will need to raise his/her ballot so that the watcher can see it through the window (to show the markings made as proof that s/he voted for the watchers' candidate). Then they will give you the additional payment.*" ("*Una, bigyan ka nila ng P500. Pag nagpa-open ballot ka, dadagdagan ka nila ng P300. Inaangat yung balota, andun yung watcher sa bintana, tapos binibigyan na ng dagdag*")

3-in-1 Vote Buying

The COMELEC personnel we talked to said vote buying in the May elections was the most rampant in the 23 years he has been working with COMELEC. He said, "*I hear about it, but I haven't personally witnessed it. The number one way of cheating (in this elections) is through vote buying.*" ("*Naririnig, hindi nakikita. Ang number one way of cheating ay vote buying*"). It has become so prevalent that there are now new ways of buying votes. According to a Sinikway voter, "*Sometimes it is 3-in-1. Three candidate-buyers running for three different positions and one voter.*" A voter interviewed admitted to having sold his votes.

POST-ELECTION

Random Manual Audit

The random manual audit performed by PPCRV immediately after the elections was done in five precincts per district, bringing the total to 30 precincts. In Iloilo City, these were in Brgy. Dulunan in Arevalo, Brgy. Bario Obrero in Lapuz, and Barangays Maria Christina, Simon Ledesma, and Balabago in Jaro. There were no significant discrepancies found during the manual audit. But outside of Iloilo City, in the municipality of Oton, the PCOS election return and RMA Team tally showed a discrepancy of one voter. After careful review, it was discovered that one official ballot was accidentally mixed with the excess ballots by the BEI.

Analysis of BEI and Technicians' Training

The goal of any type of training is to capacitate the participants by equipping them with sufficient and appropriate knowledge and skills for them to be able to effectively fulfil their tasks. The same goes for the training of the BEIs, which is among the most critical components of the AES. While the system was designed by COMELEC and Smartmatic to be technology and machine-centered, the failure or success of an election is also dependent on the human element, the performance of the BEIs included.

The BEI's roles include supervision of voting, counting and transmission of results in the precincts. Prior to Election Day, they were also expected to fulfil certain responsibilities that involved the retrieval of machines, ballots and election paraphernalia and conduct of Final Testing and Sealing. These are already big tasks to undertake, but it appears that there were unexpected tasks still waiting for them especially on Election Day. For instance, they were also the ones who assisted in purging the voters' lists, cleaned and arranged their assigned precincts, performed machine troubleshooting, managed the flow of voters, and delivered the CF cards to the city canvassing center. They said that many of these were not discussed in their training.

Furthermore, the training was delayed for two months and the planned three-month training was compressed into three days[28]. It is highly probable that inadequate training was one of the consequences of the delay in the schedule. Among the topics not taught were attaching the PCOS to the ballot box. There were also no modems and BGANs made available during training. Moreover, there were information gaps on what to expect in the precinct on Election Day. For example, they, including the city election officer, thought

all the while during training that there will be one modem and one technician in every precinct. But on May 10, the BEIs were surprised that modems had to be shared and that only one technician was assigned for every polling center that had several precincts. Election Day was also the first time that the BEIs saw an actual modem. During the BEI and technicians' training, they were informed beforehand that not everything in their manual will happen on Election Day. In fact, the manual used during training and on Election Day were of different versions. Observations made by poll watchers show that BEIs were ill-equipped to perform their tasks and would sometimes have to ask for the poll watchers' help.

It was also observed by a DOST official that COMELEC, at least in the region, appeared to be too keen on having the BEIs certified and exerted extra effort to achieve this by coaching the participants. BEIs were also sometimes coached during training on certain questions that will appear in the exams. In fact, the DOST official disclosed that they received complaints from COMELEC that they were being too strict. But he firmly believes that it is to the best interest of COMELEC that the poll workers are competent. Nonetheless, even with a certification, there is still no assurance of BEI competence. A trainer admitted that the training design was memory-based and could not accurately measure the skills of the BEIs.

In the case of Smartmatic technicians, all BEIs and poll watchers interviewed said that the technicians appeared to be nervous and not thoroughly trained. In fact, there were those who constantly had to contact their supervisors on the phone for instructions. A Montes II BEI said of the technician assigned to her polling center, *"He didn't expect that that would be their duty, that he will be the last to go home, that they will pass him around different precincts. He said that next time he won't serve in the elections anymore."* (*"Hindi daw nila ineexpect na magiging ganun ang duty niya, na siya pala ang last na uuwi, na pinapasa-pasahan siya. Next time hindi na daw siya magduduty"*) A Comelec personnel narrated that in the province of Guimaras, the Smartmatic technicians saw the PCOS machine for the first time on Election Day itself.

Stakeholders' Recommendations

Below is the list of recommendations commonly made by the respondents who represent the stakeholders in the election:

1. Develop a comprehensive voters education program
2. Bidding and preparations for elections should start at least two years before elections
3. Provide one modem per precinct, if the same technology will still be used in the next elections
4. Assign one technician per precinct
5. Give higher compensation for poll workers
6. Reduce the number of voters per precinct
7. Give BEIs a hands-on, detailed training and include basic troubleshooting
8. Repair communication and road infrastructure before automating the elections again

Overall Analysis

The 2010 elections have been likened in the past to a brand new plane about to take its first flight. This analogy was used in trying to make a point that proper preparations and sufficient testing should be completed before it is applied to a critical exercise such as a nationwide election. Proper preparations include that all types of possible scenarios had been foreseen much earlier and contingency plans had been tested for feasibility. But as experienced by people on the ground, it is clear that both the COMELEC and Smartmatic's implementation of the elections had been reactive instead of preventive or proactive. They had not given due importance to putting proper safeguards and foolproof contingency measures in the AES. This, in effect, resulted in contingencies such as the hand delivery of CF cards that only exposed the system to further vulnerabilities in an already vulnerable AES.

The problem with the rejected ballots, difficulty in filling out ballots, and clustering are among the consequences of custom fitting the elections to the needs and capacity of the machine and technology and not to the needs of the voters and capacity of the BEIs. An apt example was the clustering of precincts that pegged

the highest number at 1,000 voters on the basis that the machines can process up to 1,000 ballots[29]. They somehow forgot to consider whether the BEIs can also accommodate the same number of voters on Election Day. In the words of a Sambag Elementary School BEI, *"We don't have a break time. We should have a break time, even for lunch. We're not machines. Even machines bog down, don't they?"* (*"...Wala kaming break time. Dapat may break time kami, di ba? Kahit lunch man lang. Hindi kami machine eh, nagbobog down din yung machine, di ba?"*)

This was made worse by hiring a foreign company to implement the project. Smartmatic had limited understanding of the geography and politics of the country, for example, and are not the best people to provide for our election needs. Instead of choosing a technology that is most suitable to the needs of the country, what COMELEC did instead was to choose a technology, and demanded that the people and the country adjust to the technology. The COMELEC's mind set was one that overvalued the place and capacity of the technology. And therefore, to the COMELEC (and Smartmatic) any election problem encountered had to be human error or the fault of the voter or the BEI and never that of the machine or the AES implementers.

The irony of this was that it was not the technology that saved the 2010 elections from complete failure. It was the BEIs, many of whom had skipped voting just so they can serve in the elections, the voters who patiently waited for hours on end to cast their votes, and some local COMELEC officials who scrambled to implement belatedly promulgated Comelec resolutions and used their own resources in their goal to make the elections a success. It is the people on the ground who worked under a lot of stress, served beyond their duties, and compensated for national COMELEC's and Smartmatic's shortcomings.

End Notes

1   "Hello Garci" is a catchphrase that refers to the 2004 election scandal. Former President Gloria Macapagal-Arroyo was alleged to have called then COMELEC Commissioner Virgilio Garcilliano, nicknamed Garci, during the election period to manipulate the votes in her favour.

2   Implementation Calendar, *Terms of Reference/Request for Proposal for Solutions, Terms and Conditions for the Automation of the May 10, 2010 Synchronized National and Local Elections,* Commission on Elections

3   *'Dream' Polls Promised*, Kristine L. Alave, Michael Lim Ubac, Inquirer.net, first posted July 5, 2009, accessed July 5, 2010

4   All CF cards were recalled and reconfigured following the May 3, 2010 Final Testing and Sealing that led to the discovery of wrongly configured CF cards.

5   www.census.gov.ph/data/census2007/index.html, accessed September 1, 2010

6   en.wikipedia.org/wiki/Iloilo_City, accessed September 1, 2010

7   For the 2003-2004 school year, www.nscb.gov.ph/ru6/iloilo_city.htm, accessed September 1, 2010

8   Ibid.

9 iloilocity.gov.ph/iloiloct2010/economy.php, accessed September 1, 2010

10 en.wikipedia.org/wiki/Iloilo_City, accessed September 1, 2010

11 *Families Flaunt Political Charisma in Iloilo*, Lydia C. Pendon, www.sunstar.com.ph/iloilo/families-flaunt-political-charisma-iloilo, posted April 29, 2010, accessed September 1, 2010

12 Ibid

13 *Poll automation timeline – a guide for the auditors,* Reynaldo Santos Jr*.,* www.abs-cbnnews.com/-depth/06/11/10/poll-automation-timeline-%E2%80%93-guide-auditors, posted June 11, 2010, accessed August 31, 2010

14 There was only one PCOS machine provided for the whole Region VI's voters' education campaign.

15 An official COMELEC document that is a substitute to a contract for the poll workers serving in the 2010 elections.

16 *Technical, Manpower Problems Delay PCOS Machines Delivery*, Francis Allan L. Angelo, livefromiloilo.wordpress.com/2010/05/09/technical-manpower-problems-delay-pcos-machines-delivery/, posted May 9, 2010, accessed September 1, 2010

17 Terms of Reference/Request for Proposal III. GENERAL POLICIES, RULES AND GUIDELINES, Item No. 2 Final Testing and Sealing, Commission on Elections

18 UV markings in the official ballots were one of the security features in the ballot to ensure ballot authenticity.

19 *Poll automation timeline – a guide for the auditors*, Reynaldo Santos Jr*.,* www.abs-cbnnews.com/-depth/06/11/10/poll-automation-timeline-%E2%80%93-guide-auditors, posted June 11, 2010, accessed August 31, 2010

20 Comelec Resolution No. 8811 or *The Rules and Regulations on Detainee Voting* promulgated on March 30, 2010 (with an amended version promulgated on May 5, 2010) is a landmark resolution allowing prisoners to exercise their right to suffrage for the first time in the May 10, 2010 elections.

21 Ibid

22 According to the BEI, it took them 30 minutes to one hour to transmit the election returns to just one server. In mock elections prior to Election Day, transmission of results only took three to five minutes per transmission.

23 *Some Precincts Sent Wrong Data – COMELEC*, Ed Lingao, www.pcij.org/blog/?p=5486, posted May 13, 2010, accessed September 1, 2010

24 COMELEC Resolution No. 8914, In the Matter of Correcting Files Uploaded to the Consolidation and Canvassing Servers using the Final Testing and Sealing Results in Connection with the May 10, 2010 Synchronized National and Local Elections.

25 There were two CF card slots on the PCOS machine: one for the main CF card, the other for the backup CF card

26 Comelec Resolution 8785, promulgated February 24, 2010, Rules and Procedures for the Testing and Sealing of the Precinct Count Optical Scan (PCOS) Machines

27 *56 Electoral Cases Filed Before House of Representatives Electoral Tribunal*, Paolo Romero, updated July 26, 2010, www.philstar.com/Article.aspx?articleId=593689&publicationSubCategoryId=63, accessed September 1, 2010

28 Based on the Implementation Calendar on the *Terms of Reference/Request for Proposal for Solutions, Terms and Conditions for the Automation of the May 10, 2010 Synchronized National and Local Elections*, the Training for operators/DOST certification should be from January 20, 2010 to April 30, 2010

29 *Comelec Trins Clustered Precincts for 2010 Polls*, Anna Valmero, newsinfo.inquirer.net/breakingnews/world/view/20091118-237012/Comelec-trims-clustered-precincts-for-2010-polls, posted November 18, 2009, accessed September 9, 2010