Voting Corruption, or is it?

A White Paper by:

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Abstract of the Voting Corruption problem (Fraud or Negligence)

A problem arose in the NY Primary when a large number of voters found that their names were erased from the *Eligible Voter List* and they could not vote using normal procedures, instead they had to submit their vote on a paper ballot. This process was inconvenient, time consuming, and prone to manual errors, to the extent that many of the erased voters simply went on their way and did not submit their votes through the elongated process – totally defeating the "*One Person – One Vote*" concept of a democracy. How would you feel, taking time out from your busy day to vote for a candidate you really want to win, just to discover it would take too long and you had to go to work. All through no fault of your own.

Of course the mistake will be audited to determine its cause and what can be done to stop this problem from happening again, but the final outcome is we must have a means to *guaranty a citizen's right to vote* and have their opinion included in the country's direction. Also, a trace of the erased people's voting record must be conducted to make sure someone else had not stolen their identity to vote in the election (think stuffing the ballot box) which could result in corruption charges against any detected perpetrator's (if evidence is available to prosecute). Do you think Voting Systems must have an audit trail that can be used to trace offenders?

Weaknesses in the Voting Process

This primary season has already shown many *weaknesses in the voting proces*s that have eliminated a person's right to have their decision included in the selection of a candidate (i.e., Colorado). Some states cut back on spending for the election, which resulted in extremely long lines and discomfort for citizens – again resulting in the loss of voters who could not stand the conditions and decided they would stay/go home instead of casting their ballot. In many cases Voting Stations ran out of Paper Ballots, which resulted in producing copies by printing new ballots with a corresponding loosening of security control. The difficulties of including citizens and eliminating fraud and corruption in voting operations are paramount to the support and growth of a democratic society. How do we secure our future and the Democracy we live in?

Protecting our Citizens right to vote

Obviously another means to protect citizen rights has to be developed and I have some suggestions that I would like to see included in that process. They are:

- Insure people are registered to vote by making the process as easy as possible;
- Utilize Bio-Metrics and Smart ID Cards to guaranty a person's identity;
- Provide citizens with status notification alerts so they can avoid losing services;
- Allow for citizens to maintain their profile and make status changes as required (i.e., change of address and corresponding registration as a voter in their new district);
- Modernize the system to include Social Media and current technologies that are people friendly and easy to use (email, text messages, apps for smart phones, smart ID Cards, the ability to display and update personal records while being guaranteed that their information is secure and protected at all times);
- Allow citizen's to vote, participate in caucuses, or obtain services, via electronic technology from remote locations (think how business personnel telecommute and how they can perform their work functions via PC's / Smart Phones remotely as well as locally),

- Provide electronic / real-time services to support Caucuses, on-line voting, chat rooms, profile display & maintenance, general information, alerts, awareness, instructions, and personal status, (Consider a Phone App concept),

- And so much more….

Developing the System

Of course, the system must be developed through "Best Practices" and "Proven Techniques" to insure proper applications and services are delivered safely and are best targeted to the general citizen audience. Insure that all applications and services are fully tested and validated before implementation and roll-out. Insure that a System Development Life Cycle (SDLC) is adhered to that includes: Clear Requirement Definitions, Development, Testing (verification and validation), Acceptance, Transition, Production Operations, Support, Maintenance, Change Management, and Version Management (modules, documentation, etc.). Test all components (Hardware, Software, Network, Storage, Safeguards, etc.) to insure they work accurately, providing proven results and supporting efficient operations.

Universal Personal ID Smart Card

Consider the use of a *Universal Personal ID Smart Card* (Bio-Metrics on a Chip that is compared to locally generated bio-metric signature – Eye Scan, Finger Print, Facial Recognition, etc.) that would guaranty that an individual is who they claim to be and allow citizens access to government services or even as a gateway to a cashless society where transactions are paid electronically.

We are developing a solution we believe will meet the needs of individuals, corporations, and governments for a safe and economic means to guaranty an individual's identify and provide services. This is an overview of how it would work.

eVOTE electronic voting system

Identifying the Voter is who they claim to be

JASTGAR has produced an *Electronic Voting System* named *eVOTE* that is based on a bio-metric Voter ID Card that stores the individual's bio-metric data within the Smart Card's chip. This saved information is compared against locally generated bio-metric information to guaranty a person's identity (Match) or not (non-Match). In our voting system, we perform individual Vetting (*eVETTING*) by comparing the Voter ID Card bio-metric data with an individual's local scan (eye scan, finger print, facial recognition, etc.).

Local Verification and Remote Validation to eliminate Fraud and Corruption

We also perform remote searches to insure the individual is allowed to vote and has not already voted in this election. We created a voting process that insures Voter Identify, safety, ease of use, and rapid vote processing, and the display of voting results. We have a complete audit trail that can be used to identify fraud and corruption, and provide evidence and documentation needed to prosecute offenders.

We believe it is the wave of the future in how elections will be conducted in countries and businesses. As a result of our development efforts (Design, Architect, Requirements Definition and Agreement, Development, Testing (Verification and Validation), Acceptance, Transition, Support, Maintenance, Change, and Version controls) we have discovered a range of products that could be used to support the needs of society. They are also discussed below and illustrated above.

JASTGAR family of products
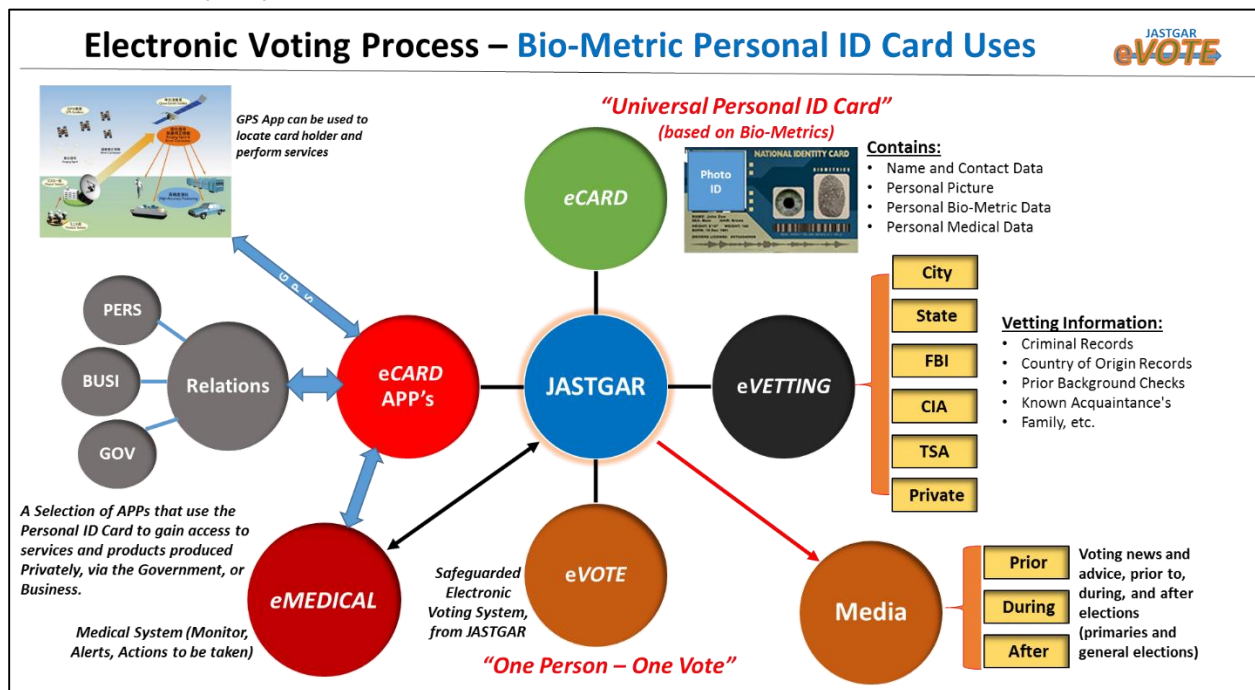
The **eCARD** (**Universal Personal *ID Card based on bio-Metrics***) consists of an individual's personal information as a Parent Record and their Bio-Metric information as a Child record, which supports local verification of a person's identity through bio-metric comparisons, and remotely validate that the individual has not already voted within this election at a previous location. This process eliminates Voter Fraud through local verifications and Corruption via remote validations.

eCARD APPs can be developed to satisfy a range of services through product offerings and government services. For example: it could be possible to connect with Voter Services to change your address or find directions to your voting station, or you could locate who your government representatives are, or be alerted to any changes in your status (which would have warned NYC Voters that they were being erased for the Eligible Voter List).

eVETTING can be used to guaranty a person's identify and to perform background checks to insure that the individual can be trusted. This information could be shared world-wide to track terrorist activity, or to clear a person for entry into a country.

eVOTE is an electronic voting system that is based on the **eCARD** bio-metrics to guaranty a voters identity locally and remotely validate that the voter has not previously voted in this election. This system can accommodate people with disabilities and can provide electronic ballots and instruction in multiple languages.

eMEDICAL is an application that can utilize a person's DNA Record Analysis to identify drug allergies, make dosage recommendations, and in essence become a medical assistance for family practitioners and emergency medical technicians and doctors. It could be connected to the individual's HIPAA records so the patient's medical history can be reviewed – even if the patient is unconscious due to a car accident.

A **Media** interface is utilized to produce information and results from Primary and General Elections, and can provide information prior to, during, and after elections. We can even provide the Media with Trending Reports, or Tailored Reports whose content and format is agreed upon by customers and ourselves.

The combination of these tools can provide a safe and secure election environment, but people will always try to beat the system or game it to their benefit. Our approach provides a bio-metric audit trail of activities, so you can produce documentation necessary to prosecute criminal and/or unethical activities. This evidence can be used to produce trending report generated through historical views over time, because it will be archived after an election is completed for a predefined period of time.

I hope this paper helped understand how an electronic voting system based on a Smart Card with an individual's bio-metric information has served as a learning lesson that will result in teaching events and actions to better provide services and safeguard people and their property.

If interested in learning more about our concepts please contact:

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