

Going Paperless In the Public Sector: An Exposition on Ghana's Ports

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Abstract — The ports of Ghana are highly depended upon by not only business in the country but neighbouring economies which are landlocked on the west coast of Africa and as such a very large business hub. In order for the shipping industry of Ghana not to be crippled, the Ghana Ports and Harbour Authority (GPHA) implemented a system which will curb the issue of extortion and discrepancies at the ports so as to optimize port procedures and reduce time spent by clearing agents and shipping agencies in claiming their goods.

This paper reviews the just implemented paperless import clearance system of the GPHA which is a driver for positive change in the shipping sector.

Index Terms— Ghana Ports, ICT4D, Information Technology Innovation, Maritime, Public Sector, Paperless System.

1 INTRODUCTION

The Ghana Ports and Harbour Authority (GPHA) which is the national port authority which oversees all freight and maritime related activities of the two ports in Ghana, Takoradi port built in 1928 and Tema port built in 1962. It has played a vital role in serving Ghana as well as a few landlocked West African countries, thereby making it the gateway to West Africa. In the Sub-Saharan port sector to date, Ghana and Nigeria are the only nations to have adopted the internationally preferred landlord model, which is the best model to improve port efficiency and quality, have the highest efficiency level and is also characterized by the public-private partnership (greater private participation) [1]. This speaks volumes regarding the GPHA's efficiency and capabilities.

Yet, in the light of all the strengths the port authority of Ghana has to its records, one of the most plaguing issues which every economy is faced with is corruption. Takoradi and Tema ports recording a corruption index of 3.50 each [1] which attests to the high level of corrupt activities ongoing at the port and has become a driver for response on the part of the Government of Ghana.

As argued by Trujillo [1], the African economic reality at the ports (corruption, underdeveloped institutions, and constraints on business competition, weak governance and inefficient ports) make international trade and investment in Africa more costly, which highlights the urgency for port sector reform.

often used interchangeably to describe work which previously was done with paper, but which now has been adapted to information and communication technology devices and software. According to the researcher, the adoption of electronic or paperless processes can be slow but is being implemented in business meetings, voting or polling places, and health care facilities.

2 THE GPHA'S PAPERLESS SYSTEM

As predicted by Trujillo [1], "control of corruption also seems to be a priority in the port reform process", and the government of Ghana has put the paperless system in place as a tool for this purpose in order to reduce loss of state finances and protect the business ecosystem of Ghana.

On the 1st of September, 2017, the GPHA launched the automated paperless system which was introduced to aid importers in the clearance of goods and as indicated by authorities, an importer is likely to spend a maximum of four (4) hours in clearing their goods from the nation's ports [3]. Figure 1, highlights the process flow diagram of import clearance in the paperless system.

Innovation of this nature drive change even in the financial sector and as such the banking sector has also adjusted their systems to make payment easier for the shipping sector by integrating their system with the paperless system.

The anti-corruption campaign known as the Tema Port Integrity Campaign was set up to conscientise the staff on the need to eschew corruption practices and exhibit openness in their operations since transparency is key in the fight against corruption in Ghana [4]. The implementation is a classic picture of a user-centered system which puts users at the core of its processes.

3 CHALLENGES AND OPPORTUNITIES

Despite the fact that this system has great potentials, future challenges are inevitable and in less than a month of its

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Thus, the paperless system was implemented to curb the issues of corruption and extortion at the ports of Ghana.

A paperless system reduces the bureaucratic processes and in this modern age of technological innovation and according to Brusco [2], the terms 'paperless,' electronic,' and 'digital' are

implementation, the GPHA paperless system has faced the following challenges according to reports by GPHA;

- Internet of the various service providers was said to be very slow,
- Invoice errors,
- Containers were not gating in fast enough
- Unstuffing charges were not billed.
- Inaccessibility to compliance releases,
- Lack of officers to pass releases after the joint inspection
- Interruptions in network systems connectivity and internet downtime [6][7]

In determining the reasons why e-government projects fail, Anthopoulos et al. [9], listed the following; Design-reality gaps, Content issues, Regulatory issues, Missing user satisfaction, Organizational power, Politics, Education, Project management issues, Ambiguous business needs and unclear vision (Missing focus), Security and privacy, Finance and operational costs, and ICT reasons and system development process. These and many other issues are threats to a successful implementation and as such must be put into careful consideration to prevent an utter failure of this system.

3.1 Efforts in Eliminating Issues Faced

In the early parts of its implementation, it was revealed by stakeholders that some phone numbers given out are wrong and consisting of workers who are no longer in the organization that is why they are not receiving feedback but were reassured by port authorities that the situation will be rectified [8]. In the wake of technicalities, GPHA's IT team was able to rectify the discrepancies in the generation of invoice and that set the pace for the smooth running of the system [7].

The Ghana Anti-Corruption Coalition has commended the port authority for the transparent manner in which they conduct their activities [4].

3.2 Opportunities and Benefits

The GPHA's paperless import clearance system's benefits outweigh any form of disadvantages and challenges likely to be faced when managed responsibly. The following are potential opportunities and benefits of a paperless public sector im-

plementation;

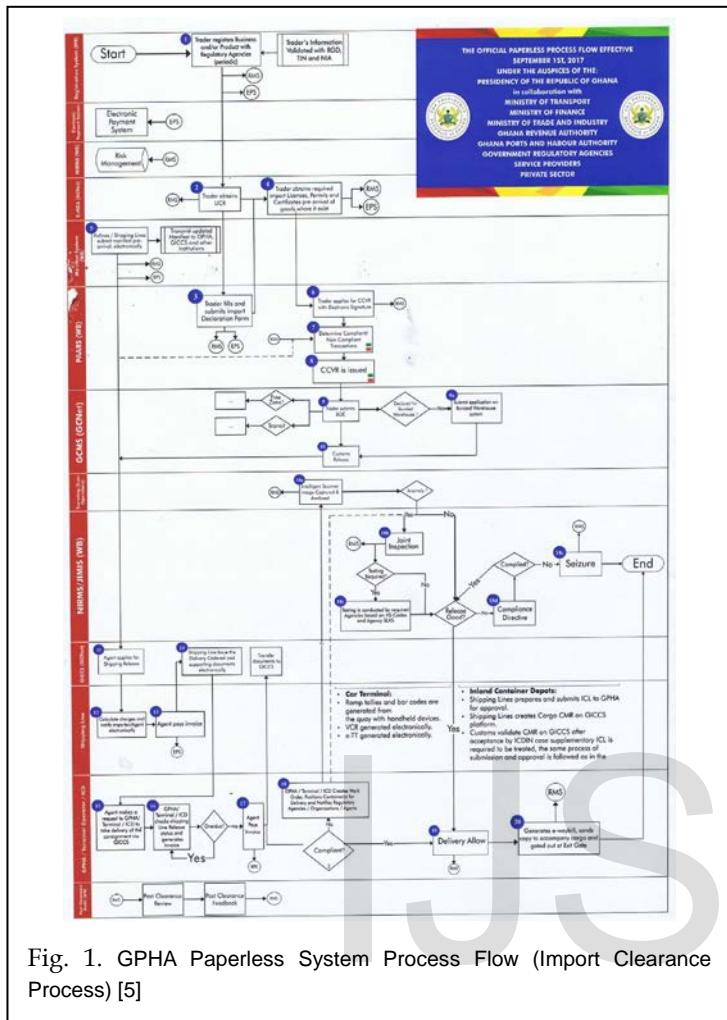
- Improved and optimized productivity,
- Extortion and corruption incident reduction,
- Easily accessible (access on-the-go),
- Secure,
- Ease of payment,
- Reducing bureaucracy, Time saving,
- Reducing carbon footprint (less paper printed),
- Easy auditing,
- Improved customer service and communication,
- Availability of information for decision making by executives,
- Return on Investment and cost saving.

4 CONCLUSION

This paper has discussed the paperless import clearance system of the Ghana Ports and Harbour Authority (GPHA) and the optimistic potentials in the near future in curbing the issues of bribery, corruption and extortion at the ports of Ghana. This system's success is dependent on various factors and its success will be a model for other developing economies to do likewise.

Stakeholders are optimistic that after reviewing the 1st week of the paperless and joint inspection procedures, the 2nd week will surely see an improvement in the systems implementation. Currently, the paperless process has been normalised and agents are able to make request and receive invoice for payments through the assistance of a help desk provided by GPHA at the revenue center [6].

Gathering from the official GPHA reports, the paperless system has a huge potential in solving so many port issues despite the minor daily challenges which is an epitome of new systems. This automation and workflow management project is a plausible innovation with regards to e-government in Ghana and is a step in a right direction for the nation. Thus, emerging technology must be seen by governments as an economic, efficiency and productivity booster in the shipping sector.



<http://www.ghanaports.gov.gh/news/1380/Paperless-Ports%3A-The-Journey-So-Far->, 2017.

- [7] Ghana Ports & Harbours Authority (GPHA), "2ND Week Of Paperless System Goes By With Relatively Fewer Difficulties But Largely Successful", <http://www.ghanaports.gov.gh/news/1386/2Nd-Week-Of-Paperless-System-Goes-By-With-Relatively-Fewer-Difficulties-But-Largely-Successful->, 2017.
- [8] Ghana Ports & Harbours Authority (GPHA), "Stakeholders Review Paperless Clearance Process", <http://www.ghanaports.gov.gh/news/1389/Stakeholders-Review-Paperless-Clearance-Process/>, 2017.
- [9] L. [6], C.G. Reddick, I. Giannakidou and N. Mavridis, 'Why e-government projects fail? An analysis of the Healthcare.gov website'. *Government Information Quarterly*, 33(1), pp.161-173, 2016.

REFERENCES

- [1] L. Trujillo, M. M. González, J. L. Jiménez. An overview on the reform process of African ports. *Utilities Policy*. 2013 Jun 30; 25: pp. 12-22.
- [2] Brusco, Jennifer M. "Trending toward paperless." *AORN journal* 94, no. 1: pp. 13-18, 2011.
- [3] Office of the President, the Republic of Ghana, "President Akufo-Addo Inaugurates Foreign Ministry's Economic, Trade & Investment Bureau", <http://presidency.gov.gh/index.php/2017/08/31/president-akufo-addo-inaugurates-foreign-ministrys-economic-trade-investment-bureau/>, 2017.
- [4] Ghana Ports & Harbours Authority (GPHA), "Ghana Anti-Corruption coalition Visits Tema Port", <http://www.ghanaports.gov.gh/news/1238/--Ghana-Anti-Corruption-Coalition-Visits-Tema-Port>, 2017.
- [5] Ghana Ports & Harbours Authority (GPHA), "Port Processes, Import Clearance and Export Procedure", <http://www.ghanaports.gov.gh/page/13/Port-Processes>, 2017.
- [6] Ghana Ports & Harbours Authority (GPHA), "Paperless Ports: The Journey So Far",