

## **Adoption of Extended RBV Model in Information Systems Technology, Processes and People's Value Chain in Postal: A Case of Postal Corporation of Kenya**

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### **ABSTRACT**

The study reviews the adoption of extendable resources-based view business concept for improved efficiency in postal and courier processes in Kenya. The paper compares service delivery differentiations using modern e-commerce models and Peoples capability maturity approaches. Several theoretical literature reviews in information technology value chain are simulated to match best-practice concepts, methods and procedures that may be useful in re-designing and developing appropriate information systems for transforming the postal and courier in Kenya. Postal Corporation of Kenya (PCK) recently initiated digital innovations such as: Mpost, Posta eWallet, Posta House Watch, Express Courier (EMS2GO) and the online eNjiwa postal services that place it back on the worldwide track for competitive advantages. PCK networks with Jersey Post and Amazon Web are budding opportunities meant for exploring the competitive edging. However, more than 560 active courier companies have registered with Communications Authority of Kenya (CA) offering alternative solutions. PCK has had difficulties counteracting the inevitable destructive power of the digital information technologies deployed by its competitors. The entry of the new players introduced substitute services in the sector that destabilized the PCK postal business monopolies. The mixed business service delivery value chain offered by the local and multi-national organizations have extremely lowered the revenue base of PCK causing it to resize its staff base due to diminished returns. The research suggests that PCK should adopt extended resource-based view approach for effective courier competitions in the industry.

### **KEYWORDS**

Extendable Resource Based View, Model, People Capability Maturity Model, Postal and Courier, Information Systems Technology, Processes, Theorem

### **1 INTRODUCTION**

The Kenyan Postal and Courier business processes have minimally changed from the old British East African Post Office systems introduced in Kenya in the eighteenth century. Soon after independence (1963-1976) the defunct East Africa Posts and Telecommunications Corporation (EAP&TC) continued to use the traditional postal systems that consisted of annually subscribed letter boxes at scattered centers countrywide with postal office addresses for sorting out the letters and light parcels dispatches in and out of the country. Apart from the postal stamps that would be fixed on the transit letters, payment receipt copies and parcel registration numbers, little could be done by the customers to track an item once it was left at the dropping box or at postal counters. Similar procedures were applied in the postal customers money orders transfer models that took several hours to reach the intended recipients [1].

The disintegration of the EAP&TC in 1977 led to the split of the entity and formation of Kenya Posts and Telecommunication Corporation (KPTC), Kenya Railways and Kenya Ports Authority. KPTC operated as a monopoly in the sector for over twenty years before the Government of Kenya introduced liberalization policies in communications sector through an Act of Parliament in 1998 [2]. The corporation would then be split into three autonomous bodies: Telkom Kenya Limited (TKL), Communications Commission of Kenya (CCK), today Communications authority (CA), and the current Postal Corporation of Kenya (PCK). The Act also opened up the market for private courier companies as new competitors in the sector. While the new entrants came up with modernized business operation models and implemented express mail technologies in line with changes in information technologies, very little improvements had since been realized in parcel security in the Posta.

In 2009, PCK introduced Expedited Mail Services (EMS) to cater for the 285 local

destinations countrywide and extended the services to more than 3,000 locations worldwide. But the problems of delivery delays, parcel tampering, and mail thefts over the years, led into loss of customers' trust, low traffic, and hence decrease in profit margins for the Posta Kenya [2].

The paper draws out reasonings from a number of information systems theories such as the Furneaux's [3] Theory of Planned Behavioral patterns (TPB) and compares the to missed opportunities in knowledge creation, sharing and technology transfer models in the modern society [4]. These analysis may assist researchers in understanding the users' behavioral intents (BI) which lead into desired action and the acceptable use of the new business model in PCK. The technology Perceived Usefulness (PU) variable discussed is weighed on the basis of observed metrics showing that people accepting or not to accepting some process simulations depend on their beliefs that it will improve their job performance [3].

The PCK mass layout of the workforce in 2004 was intended to cut down the unsustainable wage bill while endeavoring to remain afloat. But the Postal sector in the parastatal organization found it very difficult to change the behavioral pattern of the large pool of staff who are scattered all over the country. The reason was lack of collective thinking in the business focus. The technology transfer should be a function of what individual worker thinks since the transit parcels that they are handling could easily be tampered with depending on their thoughts, attitudes and interests [5]. Most employees developed resistance to the modern technologies. Customers churning increasingly became high, and so is the perennial low revenue returns.

The Government's deregulations policies in the latter periods, coupled with the spread of free social communication technologies in the Internet, led to the introduction of open market policies for courier business opportunities in the transport sector that came with substitute service delivery mechanisms and alternative solutions in the courier market. The outcome turned out to be an increasingly unpredictable courier industry that calls for the survival of the smartest in the information and communication technology (ICT) age. Today, Kenya has over 1,600 active courier companies including postal branches and

multinational organizations operating locally, PCK being just one of such competing entities [6]. Therefore, to capture competitive advantages in the postal and courier industry a firm has to develop not only improved business value chain, but also efficient business operation model.

Posta House Watch, Express Courier (EMS2GO) business strategy and the online eNjiwa postal services tended to place it back on the worldwide e-commerce competitive advantages. PCK networking with Jersey Post and Amazon Web are budding opportunities meant to explore the competitive edging. PCK has had difficulties counteracting the inevitable destructive power of digital information technologies deployed by its competitors. Entry of the new players introduced substitute services in the sector that destabilized the PCK postal business monopolies.

The local and multi-national organizations offering mixed value chain service deliveries extremely lowered the revenue base of PCK between 2005 and 2015 causing it to close down business at several of its branches country-wide due to diminished returns. Table 1. is data captured from the business growth between PCK and Government Huduma Centers that are now changing the landscape in the form of business value addition. However, the open market policy has enabled other private players to join the courier industry resulting in fierce competition in the sector [7]

Table1. Registered courier service operators adopted from Communications Authority of Kenya Annual Report 2018 with permission for the educational research purposes

Network		2012/13	2013/14	2014/15	2015/16	2016/17
Public Postal Operator		1	1	1	1	1
Total Post Offices		622	622	623	623	623
Departmental Offices		476	476	477	446	447
Sub-Post Offices		146	146	146	146	146
Private Letter Boxes	Installed	432,000	432,000	432,000	450,000	450,472
	Rented	375,093	367,200	375,840	382,500	362,566
	Un-let	56,907	64,800	56,160	67,500	87,906
Letter Posting Boxes		890	890	890	890	891
Public Counter Positions		1102	1,102	1,100	479	480
Automated Public Counters		548	556	716	472	473
Non-Automated Public Counters		554	546	384	7	7
Stamp Vending licensees		4,274	4,274	4,274	883	883
Stamp Vending Machines		280	280	280	38	38
Private Operator Outlets		707	707	2,117	976	997
Total Outlets(Post + Private Operators)		1,329	1,329	2,740	1,599	1,620

**Key:** The PCK partial monopoly product and services

In spite of the partial monopoly Posta enjoys in the country in the Private Mail Boxes, very little efforts seem to have been done to explore the high potential opportunities for using technologies such as Radio Frequency Identification (RFID) tracking devices to enhance customers intimacy and create competitive edge through its mail item tracking. Effective applications of ICT infrastructure in the country is, with no doubt, fundamental to the success of business optimization for the Postal and other courier organizations in Kenya [8].

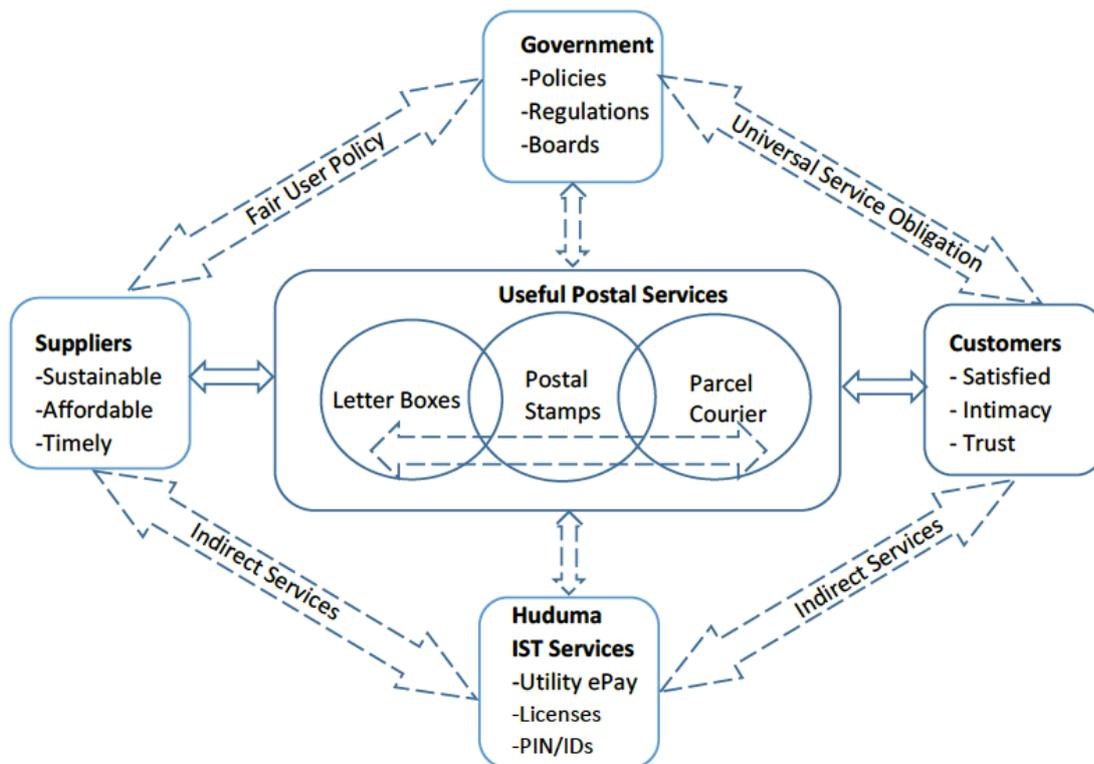
## 2 POSTAL THEORETICAL MODELS

A number of conveyance models derived from theoretical frameworks that are mentioned in the study [9], [10], [11] and [12] explain how slow change management processes adopted by Postal Kenya over the years pushed it to the point of becoming lethargic to customer’s demands, seeing no valuable challenge at the same time ignoring any activities outside their comfort zones [10]. The latter has provided an opportunity that would echo aggregate theory-building perspective where advancement is made through successively testing of the effectiveness of the external measures in a constantly changing market environment [12].

The Kenyan Government introduced Huduma Center IST services, as business collaboration model, at the Post Office business premises at major towns in the counties. With improved services deliveries in utility payments, license issuance and registrations of the mandatory state documents such as National Identities, the Huduma centers have also managed to return the much need crowds to the Posta facilities. The latter, however, has not effectively utilized the opportunity to gain competitive advantage over other courier organizations. Reason is the top-down approach focusing on cost benefits rather than buy-in by staff at the shop floor [13].

### 2.1 A General Planned Behavioral Model

The general model of Planned Behavioral theory in Figure 1 illustrates the correlation of various stakeholders’ activities in the postal centers with their externalities. The PCK light parcel courier services, both countrywide and internationally are offered under the brand name Expedited Mail Service (EMS) that operates within a Fair User Policy (FUP) to governs all other players in the sector. The PCK, however, still enjoys the



**Figure 1.** General model for Planned Behavioral theory reflecting stakeholders’ activities in the Kenyan postal system designed by the author

government monopoly on letter box services and the postal stamps. Useful postal services may be modernized to maintain competitive advantage.

The FUP safeguards on extravagances that may occur within the industry such that the suppliers, transporters and customers confer on acceptable terms (rules to be) applied to the carrier firms conveying the merchandises [14]. FUP business guidelines apply to: the physical addresses of both the sender and the receiver, size of the parcel, safety of handlers, its content, parcel status, and distance to be covered [15].

PCK, therefore, would be required to meet these international standards as illustrated in the model of Planned Behavioral theory Figure 1. positioning the parcel delivery, reliability, service visibility, security, customers convenience and reasonable cost charges. Out of the 623 postal centers country-wide EMS operates in two hundred and eighty-five destinations locally; extended through global partnering into three thousand additional endpoints globally. This is a compelling reason for the corporation to fully adopt Internet platform media its processes to help in lowering overhead expenses [2].

The courier sector has stiff competitions from both multinational firms such as Universal Parcel Services (UPS), Wells Fargo, and FedEx, etc. at one end, and local bus companies on the other end [7]. Competitive advantages for PCK, thus, may depend largely on the effective deployment of its extendable resource based strategies to derive increased intimacy.

## 2.2 A Model for Information Systems Success

The ISS success model analyses users' Perceived Usefulness (PU) through examinations of six structural dimensions in IST project modeling [3]. The first two viewpoints are: *service quality* that expunges on efficiency, reliability, flexibility, system accuracy. The Information Systems Technology (IST) system is supported with and back and front office support personnel in handling training, hotline, or helpdesk enquiries, responsiveness, tangibles, empathy, one-on-one quality, assurance; and the *information quality* where trade statistics correlates buying customers' buying patterns to gauge the product relevance, timeliness, popularity and even its exclusivity.

Two others that are critical in the ISSM model are the *intended acquisition* when users place orders of items, the nature of usage, frequency of the return of purchase, as well as the product rating; as well as the measurements for the *user gratification* levels asking where the buyer is asked whether or not he may recommend the product or service to a third party.

The fifth factor in this model is the *individual worker's impact* that include tasks performed at various postal outlets, the productivity, effective decisions, and knowledge exchange; and lastly, the *organizational impact* that looks at effects of quality improvements, increased capacity, business process changes, competitive advantages, cost reduction, enhancement of internal postal operations for its customer satisfaction.

Where an organization is able to determine the expected action in terms of the social incentives and justifiable contributories in the modern postal conveyance processes the IST data transport system value chain, therefore, should be easily monitored and corrective measures taken quickly to remedy any indirect negative phenomena that may arise out of the prolonged usage of a service.

## 2.3 A Model for Customer Centric Theory

The customer centric theory hypothesizes that individual worker's contributions are closely linked to a service or product value chain that a single customer adds up to determine his or her satisfaction level. Wherever any part of the chain link is broken the customer would reject the rest of the product [16]. The courier market in Kenya is a very agile industry that requires constant moderation due to the fierce competition.

Organization management, however, still find it difficult to gauge where and when to start focusing on the different category of customers. Attempts to apply the Technology Acceptancy Model (TAM) theorem tend to look on the level of which an individual customer believes that the product or service would boost his business outputs but the complexity of the TAM innovation often fails to generate effective competitive advantages in large groups. Application of this model has uncovered some limitations in large organizations such as its usage

in single subjects or task such a single company, one department, one branch office, or one county. Additionally, TAM implores a one-time cross-sectional study, and evaluation of problems in low validity of new measurement [17]. Therefore, as corporate organization, PCK may need to increase its investments in modern information system technology models that works better in diverse business environments. This would include perceptions the employees who may become reluctant in accepting use the new innovative technologies.

The customer centric practices model are built on relationships and marketing for the reason of attracting new clients and at the same time retaining existing ones in the organization. Lohan, Conboy and Lang [16] further argues that for an organization to succeed in the modern agile market space. The marketing survey teams have to adopt qualitative research methods in gathering data through a continuum process of living within the subjects in a considerable period of time to understand the customer's feelings toward the product, including service, their current requirements and future needs. Research findings may reveal favorable percentage of correlations between customers' beliefs, their intentions and product usage, and attitude afterwards.

#### 2.4 A Task-Technology Fit Theory Model

Furneaux [3] Technology Tasks Fit Theory (TTF) model points out some mitigation strategies that may have been ignored by Postal Kenya at some point of time. The authors use surrounding environmental analysis to gauge effects of external forces such as customers change in attitude towards the postal services attributed to lack of trust, increased inefficiencies and delayed service deliveries. The scholar's augmented reasoning is based on the Task-Technology Fit Theory (TTFT) stating that the technological advancements, changes in the government policies and the Fair User Policies (FUP) clears ways for new entrants in the courier market.

Additionally, PCK is obligated by the government's Universal Services Obligation (USO) business laws to extend delivery of its the services up to remote country-side at no increased profit mark-ups [18]. However, it is not late for PCK to remodel its information technology value chain for its services that have nominally become

too useful. Such a move would be driven by investing on appropriate technologies in tandem with the world trends. In both the short run and the long run, the perception towards a highly personalized ecommerce technologies for any service delivery environment is directly related to success and failures in the adoption of modern technology in business performance and growth to enhance competitive advantages [8].

### 3. ENHANCED BUSINESS VALUE MODELS

Huduma Centers attracts large number of clients to the shared physical facilities. This has provided the necessary visibility that PCK may turn into increased business advantage. For example, the parcel department, EMS could create an avenue for highly personalized parcel quick response (QR) that is merged with radio tracking (RFID) tags addressing technology. Various postal centers administrations as well as its customers shall be linked through middleware software that enables use of any device at anytime, be it a desktop or laptop computer, a tablet or any other hand-held devices that may be incorporated for tracking its home delivery riders [7]. To improve the PCK IST service delivery model a highly versatile ERP that combines decision support systems, supply chain management systems, fleet management system for its large pool of vehicles, and parcel tracking systems that are able to use Global Positioning Systems (GPS) in real-time may need to be adopted by the company to re-gain customers confidence.

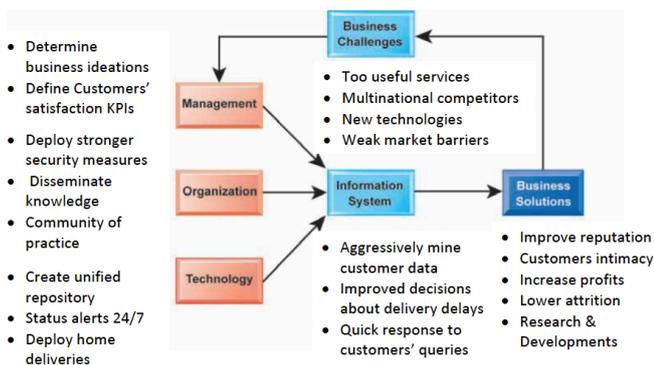
Apart from the high marginal costs for transporting the light parcels in a large variety demographic environment the high wage bill has hampered PCK's efforts in fully implementing home delivery. In the place of recruiting more staff across the country the organization may adopt 'gig economy models' [19] by connecting motorcycle riders who are willing to provide short distant transportations at minimal charges. The sub-contracted workers are generally self-employed, but habitually rely on one or more persons or organizations to link them with different clients. Examples are: Senty, Uber, Taxify, Airbnb, as well as, Instacart. Airbnb is well-known for connecting business travelers who need places to stay with people for accommodations at cheaper rental charges for short durations [19]. Instacart motorcycle groups are mainly grocery delivery service riders from

fast food stores, shops or supermarkets. The latter are highly flexible and independent. They may make their own plans and would decide which tasks they want to accept or not. Even through their conveyance charges are very low model has created jobs for several youths in the country [20].

### 3.1 Enterprise Knowledge Management Concept

A suitable concept for enterprise knowledge management technology applications for competitive postal and courier business environment would require application of modern web-based enterprise architecture (ERP) speed up transportation of the data transactions while in full control of processes and workforce allocations.

To enable PCK customize an effective ERP system it has to harmonize its resources within the information system value chain such as: the customer management systems (CRM) as well as for managing the client's relationships, Decision Support Systems (DSS) for its data analysis, accounts and financial systems, human resource systems to manage the large pool of employee deployments, business intelligence systems, the asset management systems for its capital matters, unified repository for tracing the system inputs and outputs 24/7, workflow management systems for task assignments, document management systems for record tracking, and Executive Support Systems (ESS) for planning [21].



**Figure 2.** An enterprise-wide knowledge management concept redesigned by the author to illustrate relations between independent, middle and dependent variables.

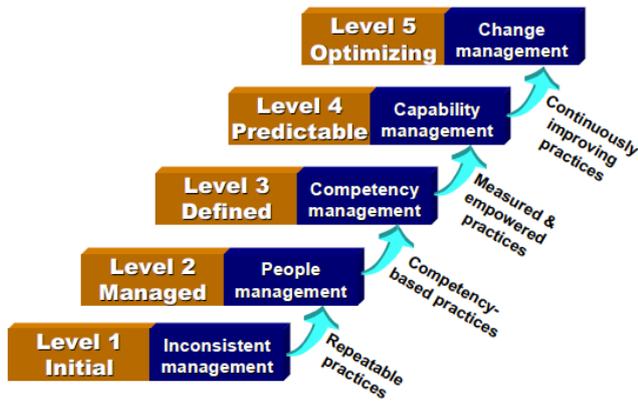
Figure 2. shows a concept of postal and courier information technology business system model that may be evaluated in terms of information security, system performance, and service quality (attributed to effects of successive use and intention to use or users' satisfaction). The net benefits may influence user satisfaction either

positively or negatively and the promote increased acceptance on use of the technology [3]. The enterprise re-design process includes the rate at which knowledge may be replicated at other centers across the nation in relations to its labor force in the full view of the management. The feed-back loop provides challenges that require constant attentions and improvements. Example of services that would be categorized as too useful include use of postal stamps and letter box rentals that may need a new business design [22]. The result of proposed solutions may include improved reputation, increased customers' intimacy and profits, as well as opportunities for more business ideas through continuous research and development activities in the organization [23].

### 3.2 A Model for Peoples' Capability Maturity

Dwivedi, Wade and Schneberger [3] further argue that Information systems technology itself cannot improve organizational performance if they are not used skillfully. Figure 3. illustrates a framework that PCK may step by step deploy to re-engineer its workforce in embracing proven best practices. The Peoples' Capability Maturity Theoretical Model (P-CMM) argues that any workforce re-engineering for organizational changes have to go through a stage by stage progressive framework that may be based on levels derived from best practices [24]. The five building blocks are evolutionary phases: the initial induction, budding stage, establishment, inspiration, and retention stages would create a workmanship value chain to help the employee corporate in the teamwork spirit [25].

The diversity of the targeted customers together with their literacy levels across the country make it very difficult to adopt a single method for handling any complain. However, to implement standard peoples' maturity and sustainability each county workforce may require an enhanced case-based-reasoning model for handling any emergent issues across different counties [20].



**Figure 3.** Five levels of People Capability Maturity Model that may be adopted by PCK for business competitiveness adapted with permission for education research purpose [24].

It is in the open domain that Posta Kenya has a enormous resource-based advantage over the new players, that include, the home advantage over its competitors, capital investments and the large pool of staff spread across the country [2]. Gaskin and Lyytinen [26] TAM II model contends that an individual employee attitudes towards practicing of any new technology directly relates to the proven outcomes of its usage. With a very large sample design the challenge for PCK would be how to achieve a homogenous acceptance for the new technology.

For the open entrepreneurs the market activities are increasingly driven by need to codify the knowledge of their products that meet their immediate demands. This may raise problem of inter-organizational knowledge transmission and utilization between the different postal and courier branches that may require alignment using the company IST policies that are well documented and accepted by stakeholders [27].

The initial step in such a large organization is for the management to set mitigation measures towards the end-users' resistance to the new systems. Quoting from "*Schumpeter Mark II Innovation model*", Schramm [23] observes that large firms may easily introduce game-changing product and services (kown also as creative accumulation) to help them maintain their competitive positions by constantly introducing novelty into the economy. Otherwise it may slowly die out. The training and business consultancy services is, therefore, necessary while building on the support from the top managers, However, failure to push the project expectations through directives and memos may

lead into slow paced implementation processes. Best practices recommend engaging the employees through the project starting with the initial stage [13].

#### 4. EXTENDED RESOURCE BASED VIEWS

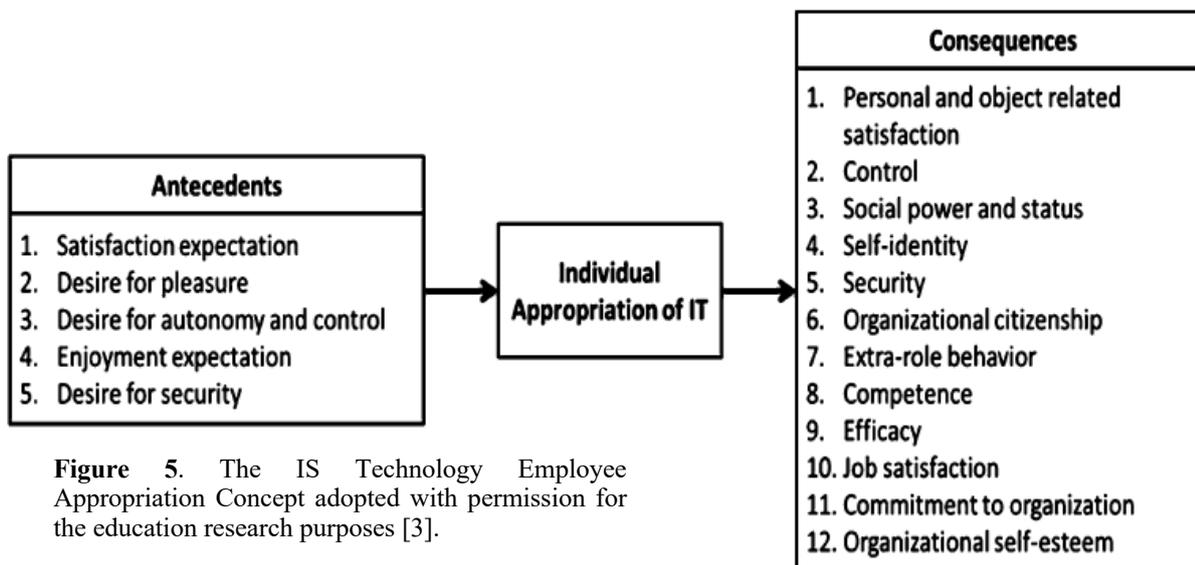
Lassila and Brancheau [28] point out that adoption of IST innovative processes business organizations such as in the postal and courier often follow intermittent adjustment patterns to derive significant changes in the appropriating the technology, end-user perceptions, and the organization framework that are based on organizational strengths. Re-designing suitable technology is a progressive business process, thus, require analysis of every variant to determine an information systems framework and procedures affecting individual employees.

Kohli and Devaraj [29] suggest that for the system payoffs to support managements' decision in exploiting the organizational resources, produce IT value chain, and calculate the returns, appropriate risk mitigations framework need to be set. The organization may also require data loss recovery policy in place since the later may be very costly in terms of money and downtime repercussions if ignored [30].

##### 4.1 A Model for Extended Business Value Chain

The resources that are needed to complement the IST investment such as skilled manpower training, and reforms for the firm to realize the IST value in its production and service delivery processes. The reality is that pay-offs from such investments are not just the responsibility of the information and technology (IT) function. Each constituent who uses IT or is involved in the value generation shares the responsibility for aligning IT with business functions [31].

Nature of its business and the targeted society has the power to re-shape business values in the workforce, technology and the processes, while converting productivity in tangible benefits across the economic and social margins. This may eventually lead into difficulties in finding real solutions to the intended social and ecological challenges [32].



**Figure 5.** The IS Technology Employee Appropriation Concept adopted with permission for the education research purposes [3].

Considering the shared values through the Social innovation models as corporate policy for inter-departmental business collaborations, the postal branches country-wide may be affected by the social and environmental changes in the parastatal organization.

The solution may lie in the inclusive business (IB) models expressed by Osburg and Schmidpete [27] as profitable core business activity that tangibly increases opportunities and improves living conditions for the people at the foundation of the economic pyramid (by engaging stakeholders) as: the employees, manufacturers, suppliers, distributors, vendors, consumers—or even as innovators.

The concept shown in Figure 5. correlates the individual employee's expectations to the initiatives that may be taken to bridge any gap and the expected consequences. When proposing any new process appropriation key considerations, therefore, would require a re-look at the organizational structure, social norms, the interdependency of various departments, vision and mission of the firm, business focus, mode of interaction and mode of resource allocations [3].

#### 4.2 Extendable Resource Based View Framework

Frank Rothaermel [34] argues out that organizations should constantly develop own resources, both tangible and intangible, where they have a niche. The tangible resources may include appropriate IT infrastructure, skilled staff, effective management team, business networks,

alliances, Business-IT strategic plans that should enable companies to address the challenges and create opportunities in the dynamic economic environment. The contemporary strategy posture should be adaptive, proactive, flexible, and combined to create the IT value.

The Extendable Resource-Based View (ERBV) Framework is a step by step business guide that looks at how firms manage their resources and capabilities to gain competitive advantage in the market [34]. Many organizations employ a wait and see attitude hoping that business-IT while imagining that payoff shall reveal itself through some magic, however, it is the other way around.

Lack of clear business obligations, erroneous measurements, and inappropriate investment together with skepticism along the IST value chain, may generate frustrations and finger pointing when the expected payoffs have not been achieved in time [33].

Rothaermel [34] sentiments are modeled on Barney and Clarks [35] views that for the return on the investment to pay off the selected IT investment may follow either of the two business strategies: The technology has to be Valuable, Rare, Inimitable and Not easy-to-substitute (VRIN). This fits well for purposes of creating competitive barrier that is not easy to break; the other option is VRIO – that of the product designs being Valuable, Rare, Inimitable and that fits with re-engineered Organization culture. Such a distinctive competency in a business framework becomes the firm's niche for PCK in the postal and courier industry [22].

Figure 6. is an extension of the Kohli and Devaraj [29] business re-alignment, involvement, analysis, communication (AIAC) framework that has four phases applied in determining an enhanced IT value chain. The feed-back circle at the end of each phase provides learning curve for improvement to boost the payoff course.

The various models discussed in the study paper are group up at the alignment phase. The postal and courier enterprise planning is then extended to determine the fit between the business strategy and the IST. At the involvement phase, the key stakeholders make decision on the process of selecting the appropriate measurements to assess payoffs. The analysis phase is where validation takes place. The decisions are grouped in the communication phase, where, findings for disbursements of actionable would be taken to enhance knowledge sharing, and resulting in process improvements while generating positive feedbacks into all previous phases for corrective measures to be undertaken without delays.

### 5. CONCLUSION

The study has contributed significantly on the understanding of theorems associated with acceptability of the technology innovations and the user satisfactions based on the D&M Theory and Information Systems Success Model (ISSM).

Comparing the overall impact of Theory of Reasoned Action (TRA) with Task-Technology Fit Theory the paper recommends that the introduction of competitive information technology at PCK should start right at the shop floor as a long-term investment for it to be applied in building the human capacity through training using some prototypes to determine what suites the PCK organization. Adopting of new technology innovations is clearly correlated to the organizational and environmental culture.

The paper suggests use of employee competency capabilities approach at each stage of IST value chain to take advantage of available capital investments spread across the country.

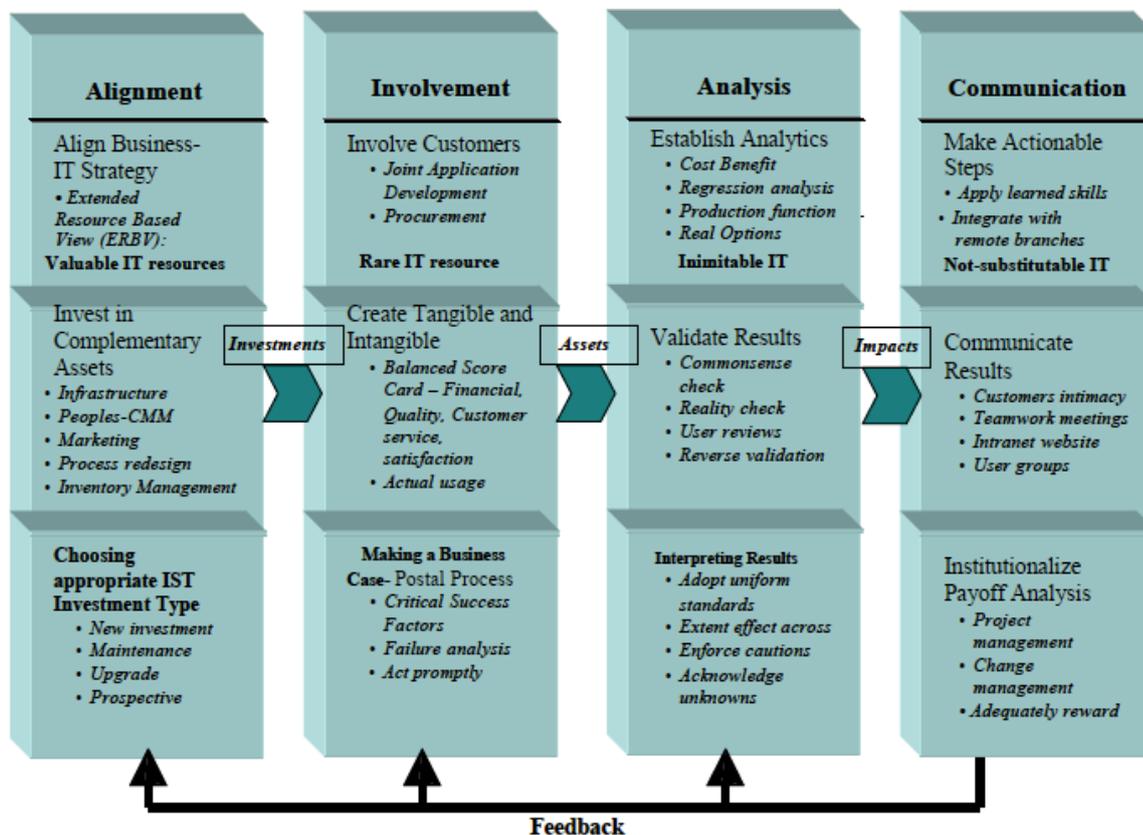


Figure 6. Extendable AIAC framework re-designed to include Resource Based View Pay-offs, adopted by the author with permission for the research purpose [29].

For the IST to have impact on the business sustainability and self-sufficiency an organization such as PCK must invest in a timely, appropriate, affordable, and secure technology. The Extendable Resource Based

View framework suggests that the engagements should be both tangible and intangible with the aim of reducing over-heads as well as marginal costs. Any decisions as well as feed-backs should be communicated quickly across all phases to harmonize the business processes.

The customer relations management tools applied in the product marketing campaigns to complement the processes should be part of essential IST investments. This should also be incorporated in the Peoples-CMM framework to buy out workers loyalty. Otherwise the new initiatives: the Mpost, Posta eWallet, Posta House Watch, Express Courier (EMS2GO) and the online eNjiwa postal services, may not add competitive advantages when there are no adequate skilled human power to drive the operations efficiency. Outsourcing of light parcel transportations to the motorcycle riders would most suitable means of increasing delivery speeds that may add up to the improved customers trust.

Failure to invest in the web-based complementary technological innovations may lower the efficiency of the postal operations. Conversely, creating and quantifying IST business value is contingent of the organizational capacity for creating an innovative business space that may include adaptive as well as responsive organization models. No doubt, the latter would require closer relationship with key stakeholders across.

Future studies may look into how to bridge employee perceptions that have been created by the digital divide phenomena between the city and rural settings. Further research may, thus, focus on ways for improving the conveyance business processes that adopt business intelligence to create competitive advantages that are invaluable, inimitable and unique in nature.

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