

Understanding SMEs and Public Sector Context

What is a 'small business'?

- Turnover?
- Number of employees?
- Market share?
- Ownership?
 - Small subsidiaries of larger partners?
- Vary with:
 - Sector?
 - Small newsagent vs small bank
 - Legal practices in Kenya, Jua kali sector
 - Country?

Are SMEs important?

- SMES in Kenya make up
 - Over 70% of business
 - 77% of total labor force
 - Contribute over 20% of country's GDP

What is an SME? 1/3

● Structure

- Flat
- Multiple roles
- Informal communication

● Enterprise dynamics

- Creativity, flexibility and dynamism
- Speedy response to market?
- Personal initiative/motivation

What is an SME? 2/3

● **Resource Poverty**

- Capital, external information and expertise
- Management, IT/IS
- Reliance on external expertise?
- Informal networks?

● **External Environment**

- Price 'takers' – reactive rather than proactive
- Closer relationships?
- Word-of-mouth/personal referrals

What is an SME? 3/3

● **Strategy/Planning**

- Formal planning?
- Are formal mechanisms needed?
- Experience/intuition not analysis
- At some point management by instinct alone will no longer be enough?
- DIY or employ specialists?

Owner/Managers in SMEs

● Key factors

- Owner(s) personality/personalities
- Quality of top management
- Goals – survival/profit/lifestyle?

● 'Owner managers'

- More involved in day-to-day operations than in larger firms
- Specialist staff?
- Jack-of-all-trades?

Drivers for using IS/IT

(Levy and Powell, 2005)

- Reducing costs (operating, sales, purchasing)
- Market share (increasing/avoiding loss of)
- Information gathering: market intelligence and finding suppliers
- Improved range and quality of products/services to customers
- Increased speed in dispatch of goods
- Improved trading relationships

Inhibitors regarding IS/IT use

E-business inhibitors	<i>Inhibitor</i>	<i>Dimensions</i>
	Cost	<ul style="list-style-type: none">• Implementation and ongoing costs• Limited financial resources and capital reserves• Need for immediate return on investment or payback
	Management	<ul style="list-style-type: none">• Insufficient time spent on planning• Insufficient knowledge or experience of IT/IS
	Security	<ul style="list-style-type: none">• Concerns about confidentiality• Fear of fraud
	Technology	<ul style="list-style-type: none">• Complexity requiring new skills• Existing IT/IS limiting future development• Lack of trust in external IS supplies• Limited in-house IT/IS skills

Source: Adapted from Levy and Powell, 2005, p 343

IS Competencies for SMEs (1/2)

Source: adapted from Cragg, 2008

● **Role of IT within the business i.e. the ability to ...**

- Ensure business strategy formulation identifies best uses of IS/IT.
- Ensure IS/organisational plans are integrated/aligned.

● **Senior Management commitment i.e. the ability to ...**

- Explicitly identify and plan to realise benefits from IS investments.
- Make business/organisational changes to maximise the benefits without detrimental impact on stakeholders.

● **Seeking new uses for IS/IT i.e. the ability to ...**

- Incorporate potential new/emerging technologies in long-term plans.
- Carry out relevant R & D into how IS/IT can create new business models/products/services.
- Understand technology trends - recommendations for acquiring technology.

IS Competencies for SMEs (2/2)

Source: adapted from Cragg, 2008

- **Key technical practices and related IS competencies**
- **Customisation of new systems ie the ability to ...**
 - Develop/acquire and implement IS/IT solutions that satisfy business needs
- **IS/IT Specialist ie the ability to ...**
 - Recruit, train and deploy appropriate staff and ensure technical, business and personal skills meet the needs of the organisation.
- **IS/IT development skills ie the ability to ...**
 - Deploy new/changed technology in the most cost effective mode to deliver application benefits.

Strategic IS Planning for SMEs

- “Recognizes the formality of the need to deal with the competitive environment while recognizing the informality of management and organizations within SMEs” Levy and Powell, 2005
- Three perspectives
 - Business context
 - Business process
 - Strategic content

#1 Business Context

- Identify business strategy and objectives
- Review business environment
 - PESTEL, SWOT etc
 - NB identify strategic opportunities from emerging technologies
- Review competitive environment
 - Porter's Five Forces framework?

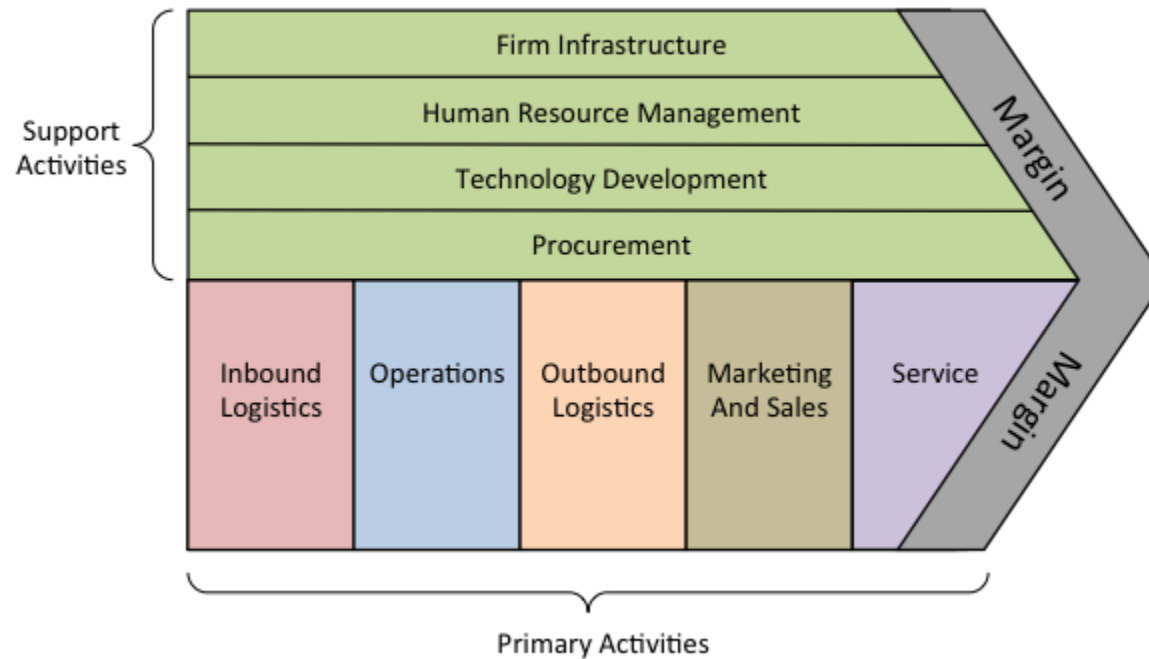
#2 Business Process

● Internal and external processes

*New entrants
Competing products*

- Where/how is value added?
 - Porter's value chain as starting point?
 - Identify information flows (link to value chain?) & identify issues impeding value adding?
- ## ● Existing IS needs **versus** business objectives
- ## ● Current IT
- Effective supporting IS/business needs?

Porter's value chain



#3 Strategic Content

- “Embodies the vision for change from the owner and the practicality of its introduction”
 - Levy and Powell, 2005, p. 114
- Compare requirement of business with analysis of organisation/environment
 - Identify IS/IT required
 - Prioritise and evaluate

The Public Sector

What is the 'public sector'?

- Central government
- Local government
- Public institutional systems, funded through taxation but separate from local/central government eg NHIF
- Public business enterprises

Public Sector

- More services
- Better service
- Faster decisions
- Informed decisions

Facts and Figures

- More than half million employed in public sector
- 1 ,017.74 Billion in Revenue 2013/2014
- % of spending on IT?

Information's Role

- Government largest collector, user, holder and producer of information
- "In pursuing the democratic/political process, in managing resources, executing functions, measuring performance and in service delivery, information is the basic ingredient" (Isaac-Henry, 1997: 132 cited in Heeks, 2006, p. 16)

But something unusual about Public Sector

- Public agencies usually have a **larger number of competing goals**
- Public agencies operate **under public scrutiny**
- Public managers operate under **fragmented authority structures**
- Public organisations have **more legal restrictions on their actions**
- Public organisations have **more restrictions on their staffing**
 - They cannot hire, fire, or promote as flexibly
- Vulnerability to political landscape

New Public Management

● **Disaggregation**

- Construction of wider, flatter organizational hierarchies
- Changes in practices/systems (including IS/IT) to facilitate more effective operations

● **Competition**

- Increasing competition in relation to resourcing requirements via 'internal markets' and external tendering

● **Incentivization**

- Greater emphasis on financial, and specific, performance measures...introduction of performance contracts by Kenyan government

E-Gov/Digital Gov

- Digital government

- the application of information technology to government processes in order to improve services to constituents
- To understand e-government, we must therefore understand IT. What does IT do?

Categories of e-govt

E-government category	Business metaphor	Description	Sub-category	Example practice
Government to citizens (G2C)	Customer Relationship Management (CRM)	Providing opportunities for greater citizen access to and interaction with the government	Managerial interaction	Government's informational Web sites
			Consultative interaction	E-voting, instant opinion polling
Government to businesses (G2B)		Seeking to more effectively work with businesses	Businesses as suppliers of goods or services	Government's e-procurement
			Businesses as regulated economic sectors	Electronic filing with various government agencies
Government to government (G2G)	Supply Chain Management (SCM)	Enabling government agencies at different levels to work more easily together	Vertical integration	Sharing a database among agencies within the similar functional walls but across different levels of government
			Horizontal integration	Sharing a database among agencies at the similar levels of government but across different functions
Government internal efficiency and effectiveness (IEE)	Enterprise Resource Planning (ERP)	Focusing on internal efficiency and effectiveness	Government to employee	Web-based payroll/health benefits system
			Integrating internal systems	Implementing ERP-like systems to integrate different functions within a single agency
Overarching infrastructure (Cross-cutting)	Enterprise Application Integration (EAI)	Facilitating the interoperability across different practices	Hardware and software interoperability	Public-key Infrastructure interoperability
			Authentication	e-Authentication across different e-government initiatives

Reflection

- Issues and challenges concerning IS/IT in the Public Sector and SMEs - **Similar or different?**
- **what about large firms?**