



**Kenya Industrial Research and
Development Institute**



**Promoting the use of Utility Model and
Industrial Design System for innovation and
technological development of SMEs: Country
experience**

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Presentation Outline

- Effective utilization of Utility Model for technological and economic development
- Narrowing the technological gap between African countries, and Developing and Developed countries
- Importance of Industrial Designs for economic development
- Experiences from Kenya and Way forward and Lessons learnt

1.0. Effective Use of UM for economic and technological development

WHAT IS A UTILITY MODEL

- There is no universal definition of Utility Model
- Utility models are a form of patent-like protection for **minor or incremental innovations**. **THAT DO NOT MEET** the three criteria but are novel and industrially applicable
- Other names: petty patents or innovation patents, short term patent,
- **UM Protect the functional aspect of a product (examples of utility models apply to the functional aspects of toys, watches, optical fibres, machinery, etc).**

1.2. Countries with Utility Model laws

- UM played a role in the industrial development of countries like Germany and Japan, as well as South Korea and India.
- Many countries in Africa provide for protection of small innovations under Patent
- Many developed countries: Germany, Denmark, France, Italy, Netherlands, Finland, Spain, Portugal etc. have UM Laws
- However countries like Japan, China and Korea have exploited the system very successfully in order to promote the technological development

1.3. Advantages of protecting innovations and inventions through UM

- (i) Provides exclusive rights to the owner
 - enabling securing protection for innovation that do not meet the stricter novelty and inventive step requirements of patent law;
 - Protection means that no one can exploit your work without your authority (sale, produce, manufacture)
 - Protection for 10 years
- (ii) making it possible to increase the role of traditional innovators and artisans in economic development;

1.4. Advantages cont..

iii) It rewards the innovator

■ UM allow holders to exploit the invention

■ early due to short time taken for registration

■ This helps them to early introduction of products in the market resulting out of utility model innovations.

■ UM can be licensed - source of income to the owner

■ (iv) acting as a catalyst to enhanced levels of innovation;

■ (iv) UM are cheaper to acquire than patents;

■ (vi) Contributes to the technological information

1.4. Countries that have effectively used UM system

1.4.1 Germany

- UM law established in 1891 and is the oldest
- Provide protection to such inventions which had low level of inventiveness .
- non- substantive examination system
- shorter period of protection
- Utility model applications for a long period was more than patent applications

1.4.2. Japan

- Until World War II, the technical level in Japan was low compared to western countries
- Beginning of 20 century- technology gap between Japan and western very wide
- There was need to develop their own technology.
- Examination patent very strict: for novelty and inventive step,
- Foreign applicants were able to obtain patent
- A large number of rejection of patent applications filed by locals
- Only few patents being granted to Japanese
- Japanese inventors were discouraged-Protection of small invention under patent law not possible.

Japan



A strong need for protecting such inventions which had lower level of technical standard

- Japan has Utility model system since 1905
- Utility model system has remained part of business strategy.
- In fact, the system was designed to encourage, incremental and adaptive innovations and early disclosure became very important source of technical change and information diffusion in Japan

Japan



Technology diffusion through UM system had a positive impact on Japan's post war productivity growth

- The UM protection law has been fully utilized by Japanese companies until Japanese's technology became so advanced and gap between Japanese and western technologies disappeared.
- Today Japan stands very high in the technological development
- Today the number of applications for the grant of patents has been continuously and rapidly increasing

1.5.3. China

The Patent Law in China was adopted on March 12, 1984 but came into force from **April 1, 1985**

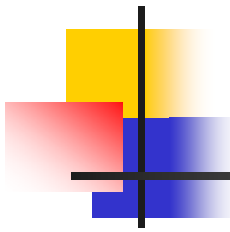
- The law governs patents, UM and ID
- **UM system has been utilized very effectively as number of applications filed for UM have always been at top and more than invention patent and industrial designs upto 2003.**
- The above trend indicates that the UM protection system has been very popular and successfully exploited in China
- **The average filing in last ten years indicates that 84% applications are filed by domestic and 16% by foreign applicants only.**

Summary of China Application: 1994-2003

TYPE OF APPLICATION	TOTAL APPLICATION	LOCALS	NON-RESIDENTS
Utility Models	648, 665	644,038 (99.3%)	4,627 (0.7 %)
Patents	476, 041	226,674 (47.6%)	249,367 (52.4 %)
Industrial designs	444, 618	407,338 (91.6%)	37, 280 (8.4 %)

Source: SIPO as quoted by Uma Suthersanen, (2006)

1.5.4. USA

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- The United State, **does not** have utility law system to protect the small innovations.
 - Since the United States patent law provides for **protection to everything under the sun** made by man, no need yet felt for having such kind of a system.
 - The United States has more concerns to protect the intellectual Property of its innovators overseas rather than in its own jurisdiction. However, in its law, apart from patent,
 - the inventions are also protected as design patent.

2.0. Narrowing the technological Gap: Use of UM in Africa

The section seek to provide answers to the following questions:

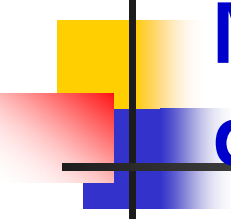
- Is there relationship between Patent Information and utility model applications?
- Is there a relationship between Utility Model applications and technological development of a country?
- Do countries in African require protection for small or minor inventions? (Opportunities to exploit from UM)
- How can African LDC and DC use the UM and ID system to narrow the technological gap and promote local industrial growth?
- What type of utility model system is most beneficial to countries in Africa?

2.1. Correlation between Patent Information and UM Applications

- China, Japan, Brazil, Korea bridged the technological gap through **use and adaptation of technologies from Western countries**
- What was the source of information for these technologies? most likely “patent data bases”
- Initially number of applications for UM was more than those for Patents and ID
- Once the technical knowledge had grown they started filing for patents
- **Currently China and Japan are among the top five patent applicants**
- What can we learn from this?

2.2. Correlation between UM applications and technical development

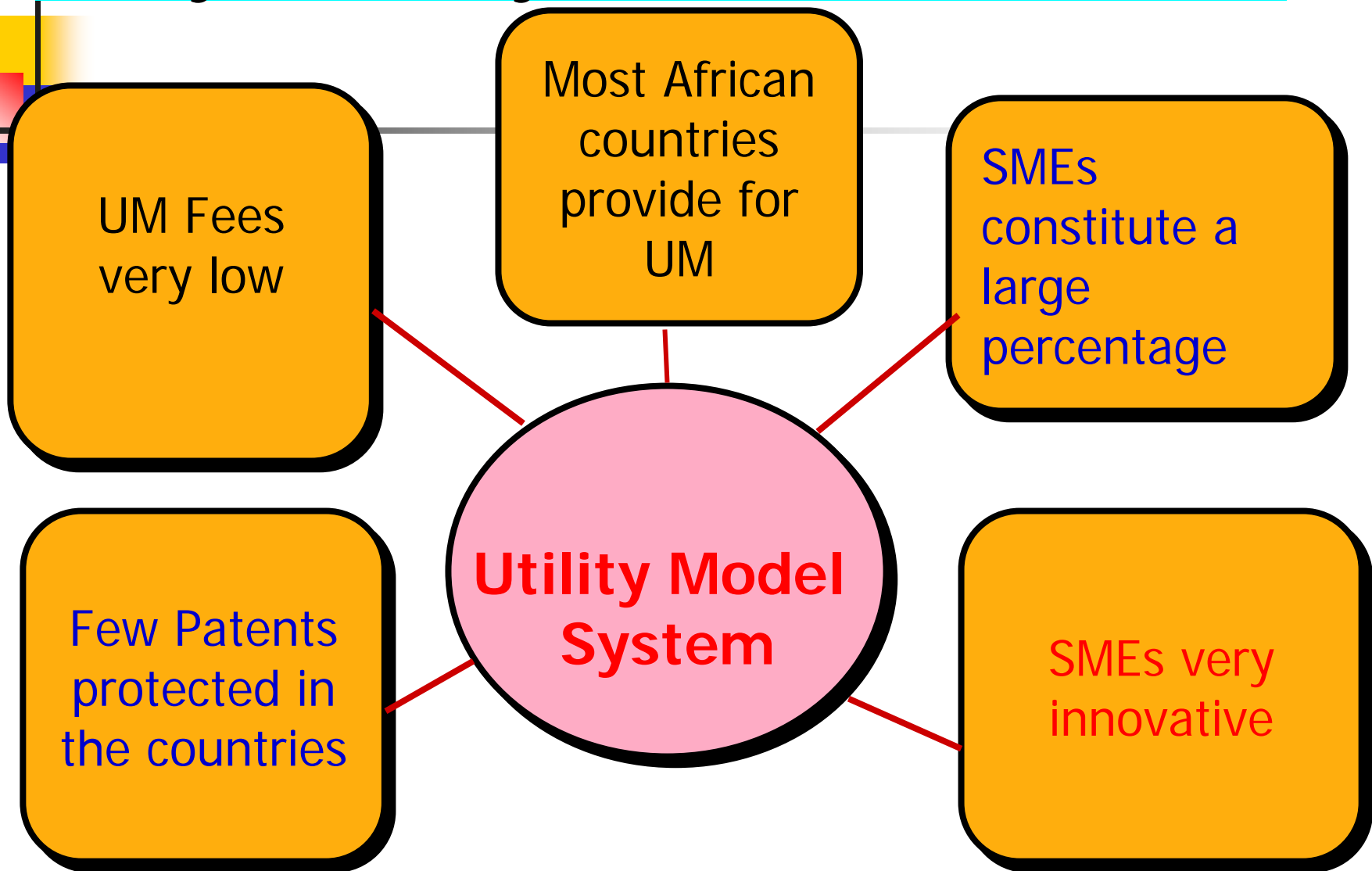
- Although, there is no evidentiary proof that UM has any relationship with technological and economical development of Japan
- but trend in growing number of UM applications from the time when utility law was established in 1905 to 1981 provides some indications.
- It may be observed that during this period, there had been tremendous technological progress in Japan which was mainly dependent on the imported technologies
- but now has become the technology exporter.



2.2 Correlation between Utility Model applications and technical development cont..

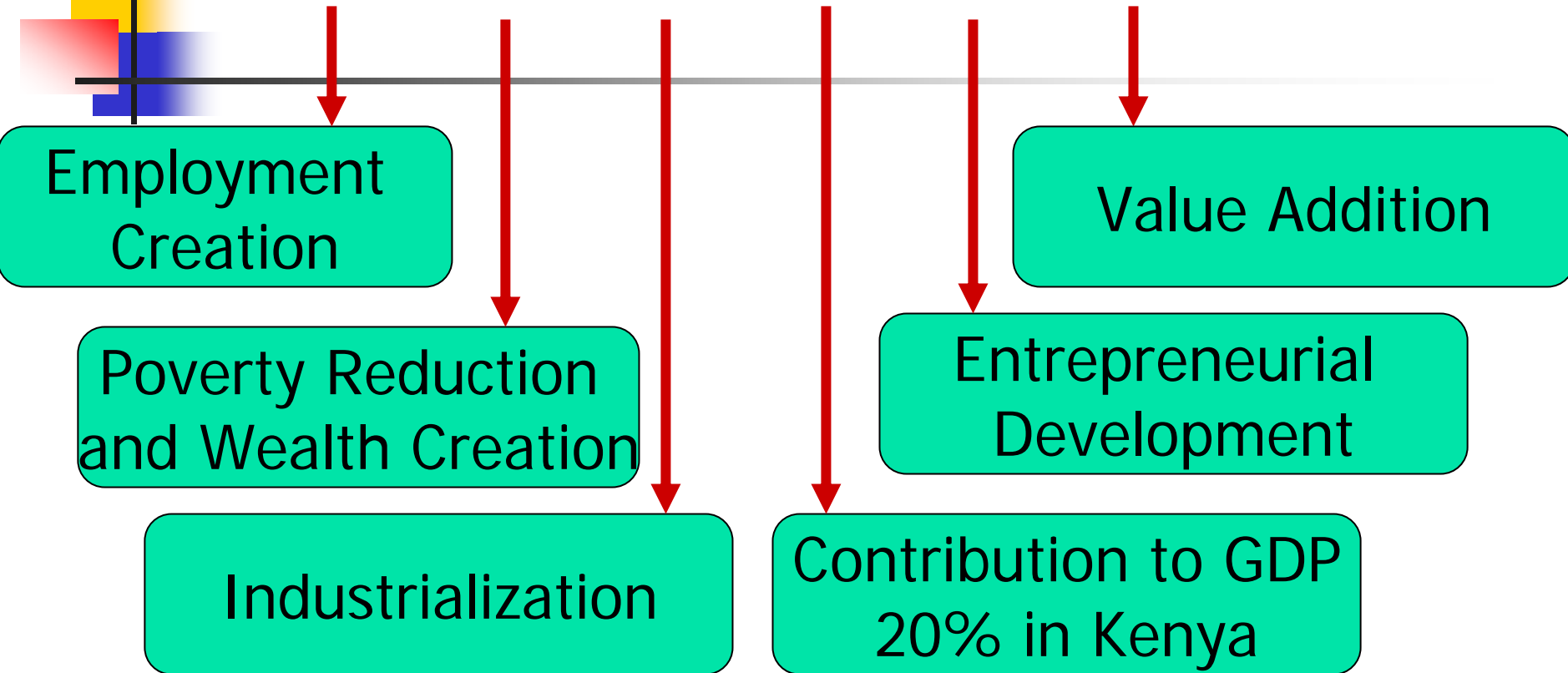
- 1905-1981- during this period Japan economy was growing at very high rate
- Since the technological up-gradation made by Japanese innovators was of the nature which could not have been protected under
- patent law, the utility model law was fully utilized to protect such petty and small but utility modifications.
- Therefore it can be inferred that utility model protection has played a very important role in the economic as well as technological development of Japan.

2.3. Opportunities to exploit from Utility Model System



6/22/2015

2.3.1. Importance of SMEs



2.3.2. Characteristics of SMEs Products

Most of the products though functional are:

Low quality

Less attractive in appearance

Low efficiency and effective

Lack of standardization of products

Products that are not protected by IP

MSMEs are known to be very innovative.

The today's MSMEs would be Tomorrow's multinational companies

2.3.3. Utility Model and Patent Information con..

- Around 70 million Patent Documents World wide:
- 10 Million Patents currently in force world wide
- 60 Million patents can be exploited for FREE

Country	Number of Patents filed	Free patents to be exploited
Kenya	2300	69, 998,000
Tanzania	>1000	69, 999,000
Sierra Leone	>100	69, 999,900
Botswana	>100	69, 999,900

2.4. Challenges in using UM in Africa

- There is very low usage of UM in Africa
- Low level of awareness on UM
- Negative perception of utility model as lesser innovation and protection
- For years utility model protection was through stringent substantive examination.
- This discouraged many SMEs as in most cases the applications were rejected.
- Long period of processing the application thus very discouraging since protection is only for 10 years

3.0. Importance of Industrial Designs

3.1. ID and Business Strategy

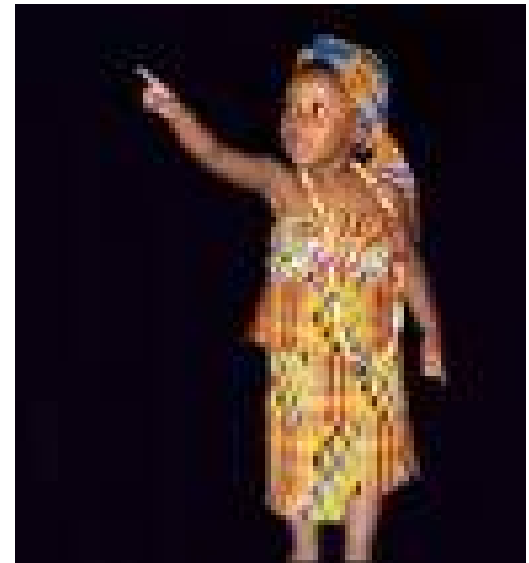
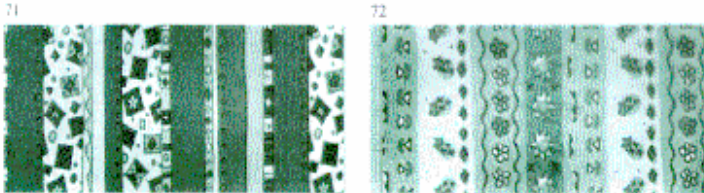
- **i) What is an Industrial Design?**
 - The ornamental or aesthetic features of a product. In other words, it refers only to the **appearance** of a product and NOT the **technical or functional** aspects.
 - Any composition of **lines or colour** or **any three dimensional form** whether or not associated with lines or colours; provided that such forms or composition **gives a special appearance** to a **product of industry or handicraft** and can serve as a pattern for a product of industry or handicraft



Industrial designs cont..

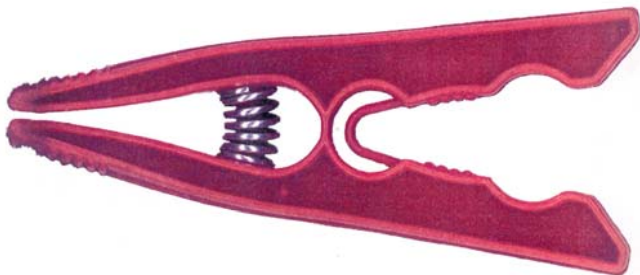
- Industrial designs is relevant to a wide variety of products of industry, fashion and handcrafts from technical and medical instruments to watches, jewelry, from household products, furniture and electrical appliances to cars and architectural structures, textile.
- Industrial design is also important in relation to packaging containers and get up of products.

Two dimensional designs



Three Dimensional design

Examples of Industrial Designs



ii) Importance of Industrial Designs in Business

- Enterprises devote a lot of time and resources to enhance the design appeal of their products. New and original designs are often created to appeal to the market needs
- **Customize products** to appeal to specific market segments
- Small modifications to the design of some products e.g watch, may make them suitable for different age groups, cultures or social groups
- **Create a new niche market.**

In a competitive market place, many companies seek to create a niche market by introducing creative designs for their products to differentiate them from those of their competitors



Importance of Industrial Designs in Business

- Strengthen their brands images.
- Creative design are often **combined with distinctive trademarks** to enhance the **distinctiveness of a company's** brand (s). Many companies **have successfully created or redefined** their brand image through a strong focus on **product design**
- It adds value to a product.
-



iii) Why protect ID



Strengthening competitive edge

- The creator is granted the exclusive right to prevent others from unauthorized copying, imitating, making, selling, or importing any product in which the design is incorporated or to which it is applied and thereby strengthen your competitive advantage
- **Return on investment**
- Registering a valuable designs contributes to obtaining a fair return on investment made in creating and marketing the relevant product, thereby improving your profit



Why protect IDs

- **Revenue generation**
- Registered design may be **licensed (or sold)** - Industrial design may be assigned, licensed, mortgaged or transferred, **enter markets that you are otherwise unable to serve.**
- Encourages **fair competition** and **honest trade practices** which in turn, promote the production of a diverse range of **aesthetically attractive products**



Why protect IDs

- **Business asset** increasing commercial value of a company and its products –the more successful a **design the higher the value is to the company**
- Industrial design forms part of the **fixed assets** of a company.
- A protected design may also be **licensed or sold** to others for a fee. Through this you may be able to **generate more revenues**

4.0 UM and ID Protection: Experiences from Kenya and way forward

- UM and ID are protected under the Industrial Property Act 2001
- ID as a registered design provides exclusive rights to the registered owner for up to **15 years from the filing date of the application.**
- There is very low usage of UM in the country compared to industrial designs
- Negative perception of utility model as lesser innovation
- KIPI changed laws wherein in registration is granted within one year without **substantive examination**

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Examples of inventions protected as UM in Kenya

SAHREC COMPANY LTD

- Invention: An Immune Booster (A Food Supplement)
- Inventor: Mr. Michael Odote
- Patent Application Number: KE/UM/2006/163
- Designated Countries: Kenya
- Dr. Odote noted that many people in Kenya were dying out of malnutrition, HIV/AIDS and old age. He thought of a product that would act as food supplement.



Industrial designs in 2011-2012 at KIPI

■ Industrial Designs

- 89% of the applications received during the period were filed by Kenya residents.
- The main field of activity was in relation to bottles in Locarno class 09-01 where 27 applications were received representing 25% of the total

Summary of UM and ID Application at KIPI: 2008-2011

year	Origin of application	Type of application					
		Patents		Utility Models		Industrial Designs	
2008-2009	Residents	58	8	19	3	66	40
	Non Resi	2	2	1	0	14	7
	PCT	112	50	-	-	-	-
2009-2010	Residents	58	1	24	4	73	44
	Non Resi	7	4	1	0	4	9
	PCT	100	65	-	-	-	-
2010-2011	Residents	125	8	41	3	68	24
	Non Resi	0	1	0	0	27	6
	PCT	130	46	-	-	-	-

4.1. Way Forward and Lessons Learnt

- Promoting use of industrial designs by SMEs

African countries require rapid, cheap protection for small or minor inventions

- UM have potential as a tool for spurring innovation, promote local industrial growth
- Need to Promote use of utility model to narrow the technological gap
- Making utility model protection attractive through longer period of protection
- Type of utility model system most beneficial to countries in Africa is registration of UM without substantive examination (my suggestion)



Thank you

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