

High-Level Meeting for Members of Parliament of the African Regional Intellectual Property Organization (ARIPO) Member States: Strategic Use of the Intellectual Property (IP) System for Economic, Cultural, Social and Technological Development

Kampala, Uganda, March 25 and 26, 2015

“The Patent System and its Use by Business and Research and Development (R&D) Institutions”

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Making better use of Intellectual Property for business competitiveness and development in Africa

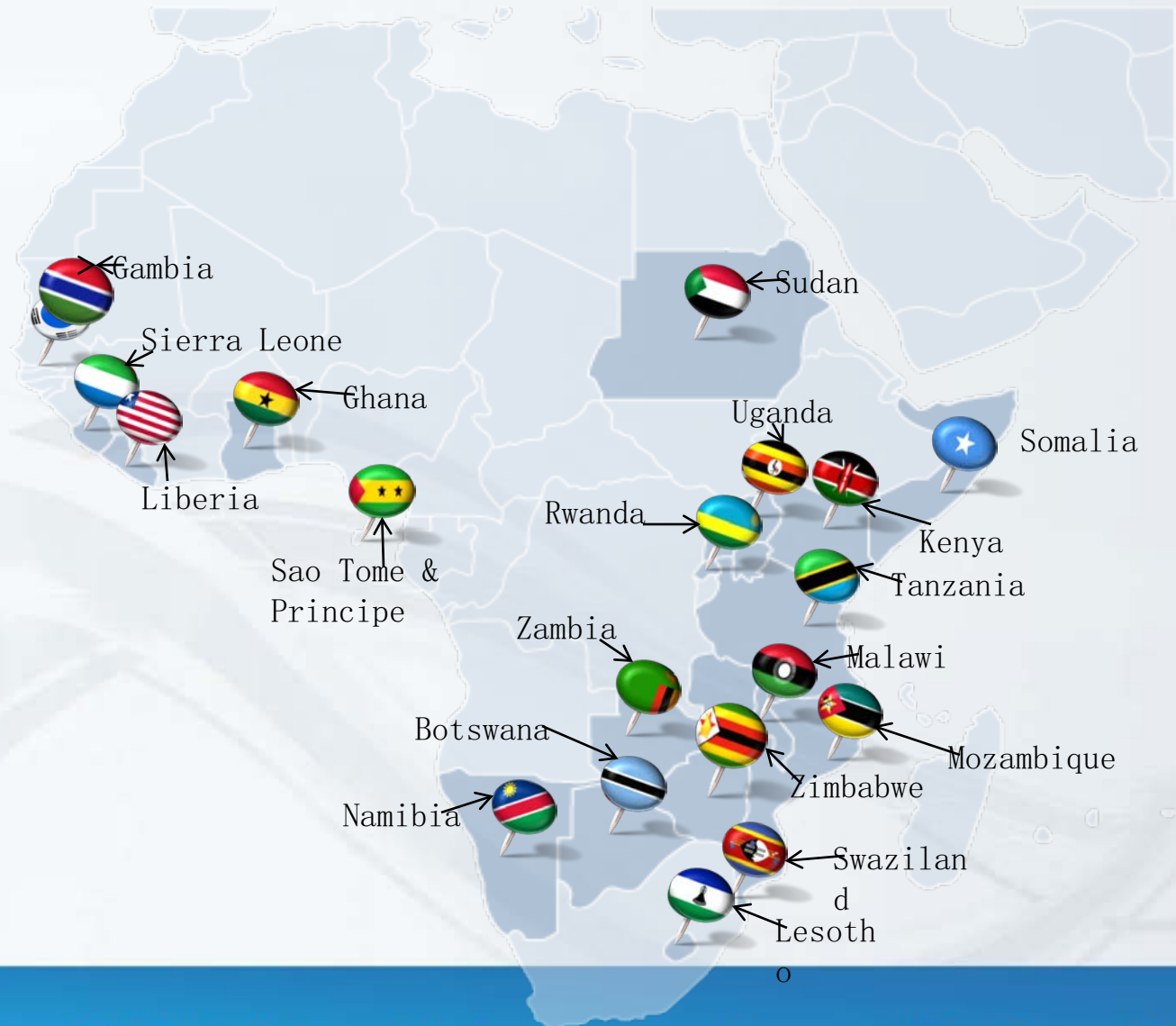
Presentation overview

- ARIPO Background ;
- The Importance Inventions/Innovations;
- IP as intangible property in business;
- Using IP Information by SMEs & Business Institutions;
- The Value of Reverse Engineering (RE);
- Conclusion: Is IP linked to development?

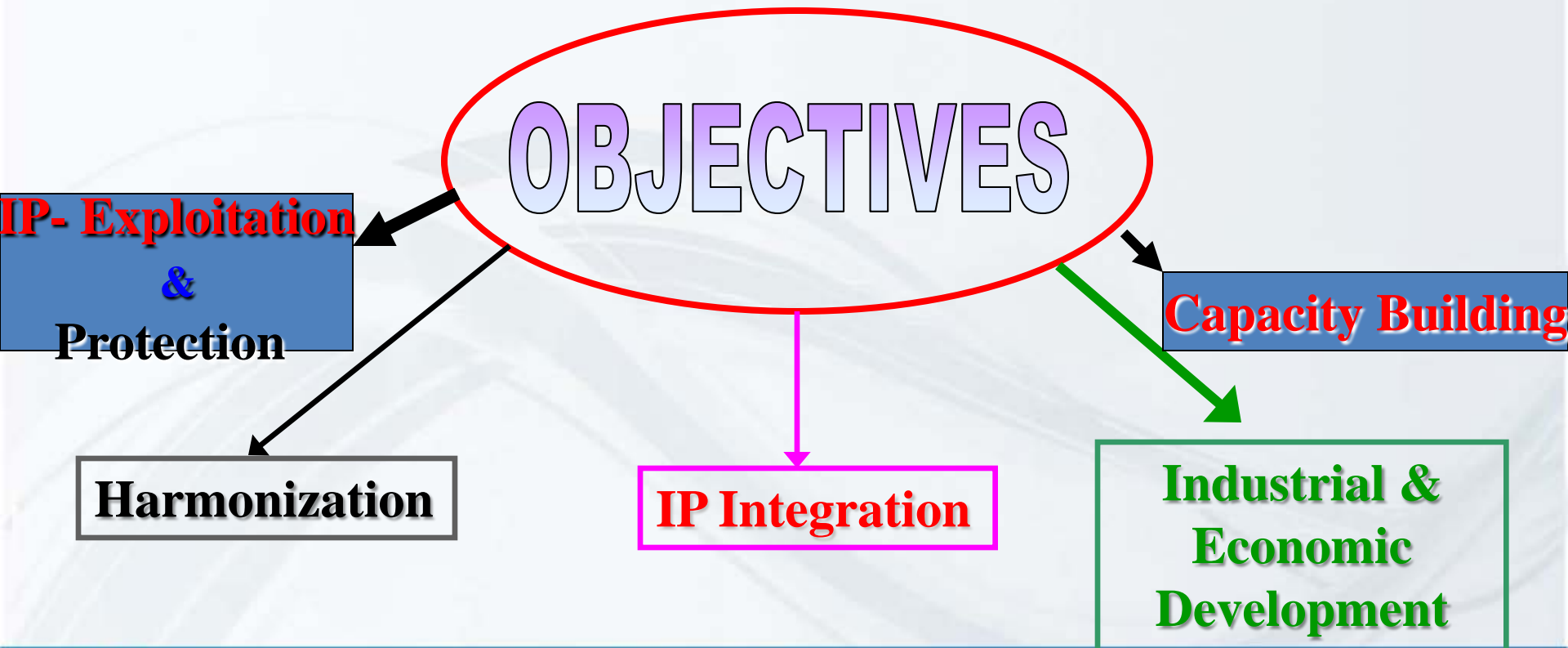


Membership

- Botswana
- Gambia
- Ghana
- Kenya
- Liberia
- Lesotho
- Malawi
- Mozambique
- Namibia
- Rwanda
- Sao Tome & Principe
- Sierra Leone
- Somalia
- Sudan
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe



ARIPO Regional Strategy & Policy



ARIPO Mandates

**Patents and
Utility Models**

**Industrial
Designs**

Trademarks

**TK and
folklore**

Harare Protocol

Harare Protocol

Banjul Protocol

Swakopmund Protocol

Copyright

**Access and
Benefit
Sharing**

**Geographical
Indications**

**Plant Variety
Protection**

**Council Min
(2002)**

**Draft Regional
Framework**

**Regional Framework
National Frameworks**

**Draft
Protocol**

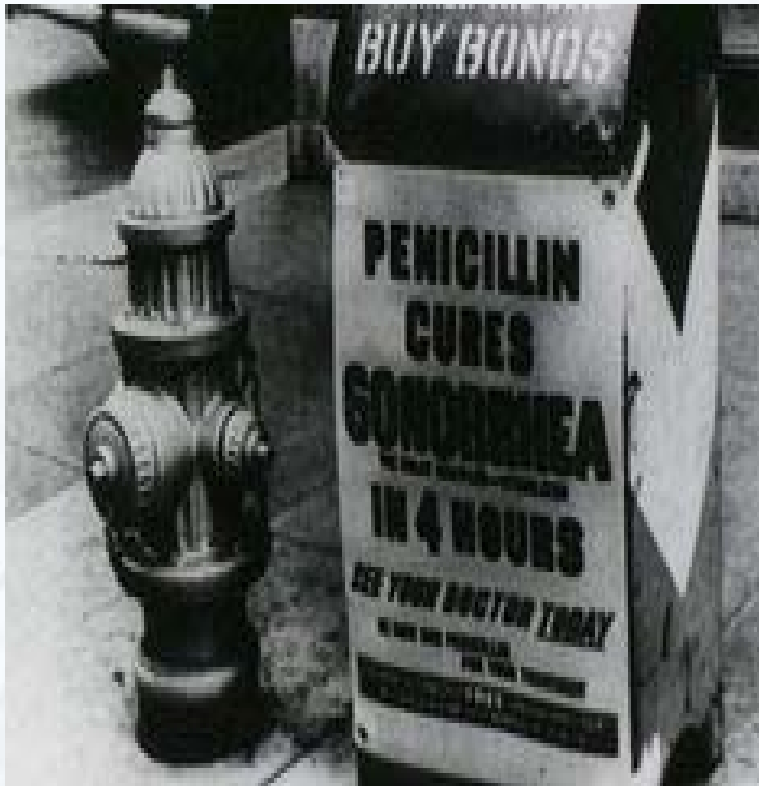


The Wheel

- Before the invention of the wheel in 3500 B.C., humans were severely limited in how much stuff we could transport over land, and how far. Wheeled carts facilitated agriculture and commerce by enabling the transportation of goods to and from markets, as well as easing the burdens of people traveling great distances. Now, wheels are vital to our way of life, found in everything from clocks to vehicles to turbines.



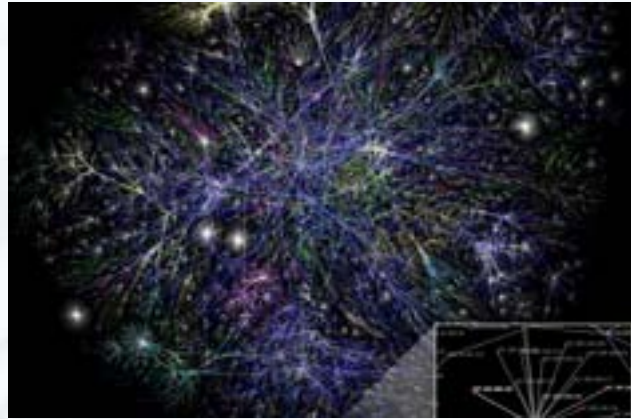
Penicillin



In 1928, the Scottish scientist Alexander Fleming noticed a bacteria-filled Petri dish in his laboratory with its lid accidentally ajar. The sample had become contaminated with a mold, and everywhere the mold was, the bacteria was dead. That antibiotic mold turned out to be the fungus *Penicillium*,



Internet



The global system of interconnected computer networks known as the Internet is used by billions of people worldwide. Countless people helped develop it, but the person most often credited with its invention is the computer scientist Lawrence Roberts. In the 1960s, a team of computer scientists working for the U.S. Defense Department's ARPA (Advanced Research Projects Agency) built a communications network to connect the computers in the agency, called ARPANET.



Example: Nokia Perceptions – Easy-to-Use Personalization



25 patents + at least 9 "brand" patents + speech/sound quality improvement + power consumption

US 5479476 User adjustable characteristics can all be modified when moving from to another environment

US 6094587 Programming of a Ringing Tone

US 6006114 Instead of a ringing tone, vibrat or light is used as an indicator of an incomi call

US 6185295 Phone number databas

US 6988909 Personal info card sent by SMS

US 6026121 Call Rejection Key

US 6043760 Characters associated with a key are based on language selection

US 6310609 Keypad back light activated when key is pressed

US 5956633 SIMlock

US 5920826 Text Messaging System

US 6097964 Roller Key Constructor

US 6047796 Method of searching phone book and placing a call to identified number

US 5241583 Soft Key Lock is temporarily disabled by an incoming call

US 5794142 Activation of network services by using SMS messages

US 5835858 User can manually activate the phone

US 5842141 User-initiated pager mode (US)

US 5870683 User can select graphical icons

US 6115617 If a name already exists in the phone book, the phone asks whether the user wants to overwrite the existing info

US 6138091 Power saving: Signal recording only when voice is recognized

US 5845219 Caller Profiles

US 5692032 Message can be acknowledged by one key

US 6128509 Intelligent Service Recognition

US 6112099 Power consumption optimized: Data connection open only when data is being transferred

US 5903832 Network can be specified by the user

US 5804084 Soft Key Lock

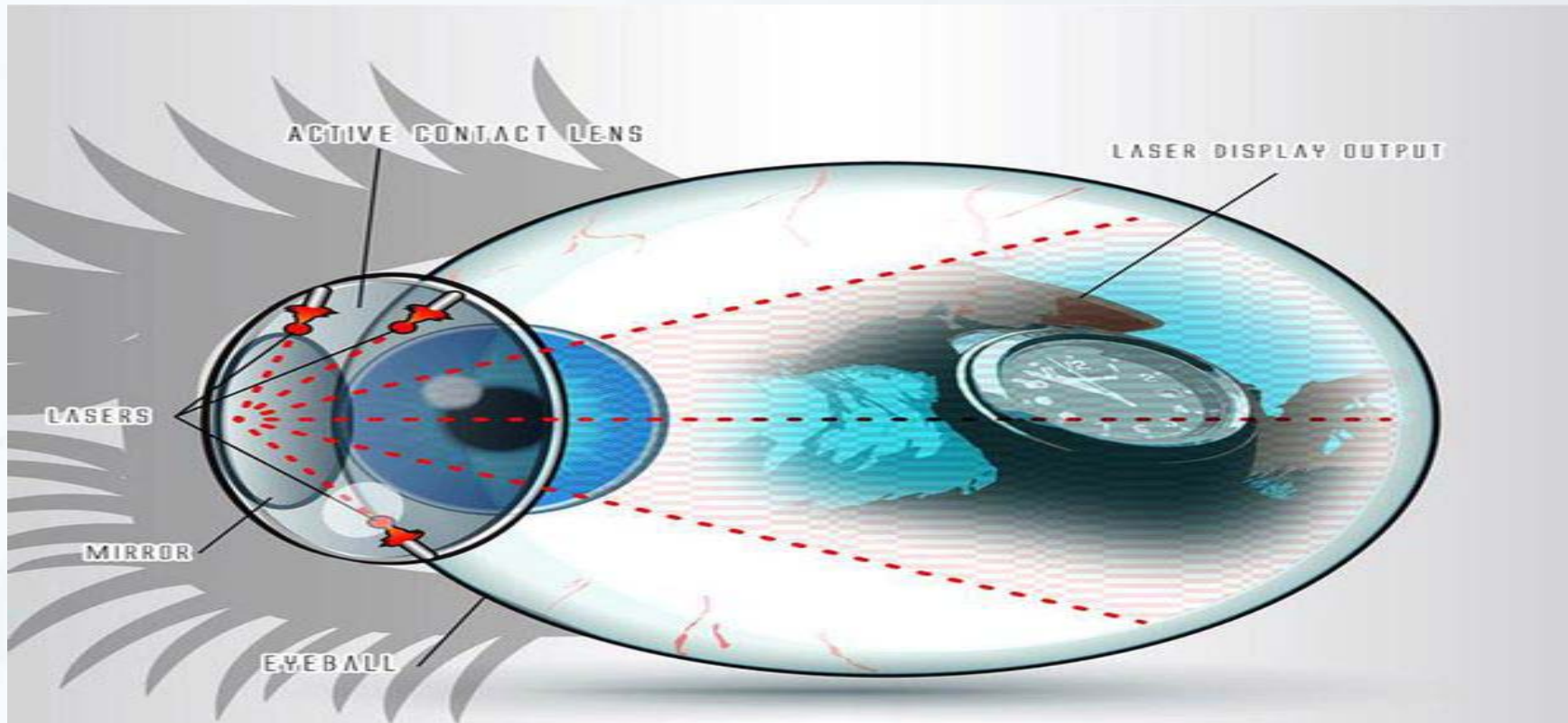
NOKIA

Example of new Inventions “Google Glass”

- Google glass is, simply put, a computer built into the frame of a pair of glasses, and it's the device that will make augmented reality part of our daily lives. With the half-inch (1.3 cm) display, which comes into focus when you look up and to the right, users will be able to take and share photos, video-chat, check appointments and access maps and the Web. Consumers should be able to buy Google Glass by 2015.



Possible Future Invention???!!



ACTIVE CONTACT LENSES

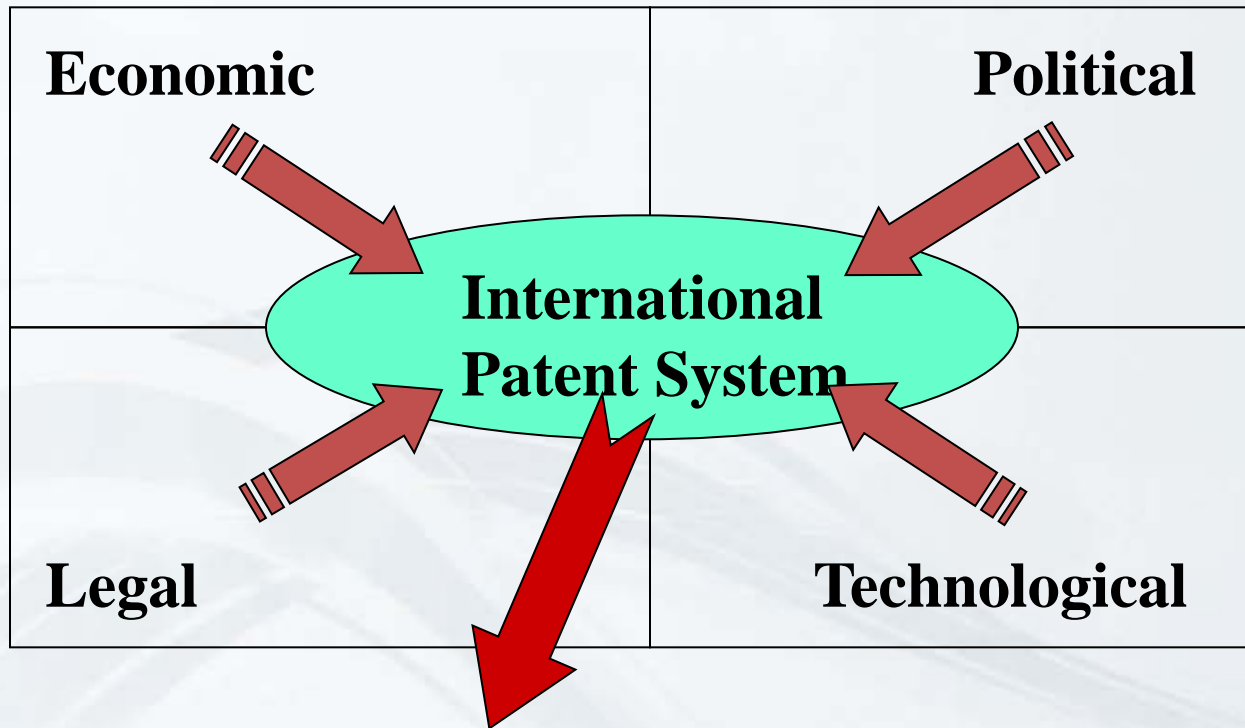
Active contact lenses: these will sit in your eyes like ordinary ones, but will have three tiny lasers and a micromirror to scan the beams directly onto your retina, creating images in as high resolution as your eye can see. This could make all other forms of display superfluous. If for historic reasons you may want to see a wristwatch display, mobile phone, pad, or TV, you can simply do it virtually. But the contact lens can deliver a full 3d totally immersive perfect resolution experience. They will even let you watch movies or read your messages without opening your eyes.

The role of IP as property

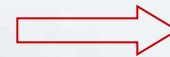
- Commercial exploitation;
- **Investment;**
- Transfer of technology;
- Cultural Development;
- Human Development, etc.



Global Patent Environment



Increasing demand
Increasing tension



International
cooperation



Using IP Information by SMEs & Business Institutions

- Some Business institutions Undertake research for – New Products, processes, equipment or improvements;
- Some Challenges facing Governments, SMEs, Researchers & Businesses in Africa include:
 - Belief that every technical problem requires R&D;
 - Limited information on alternative solutions;
 - Limited Funding;
 - Lack of the will to tighten belts and change;
 - Duplication & Copies of Business Activities, etc.

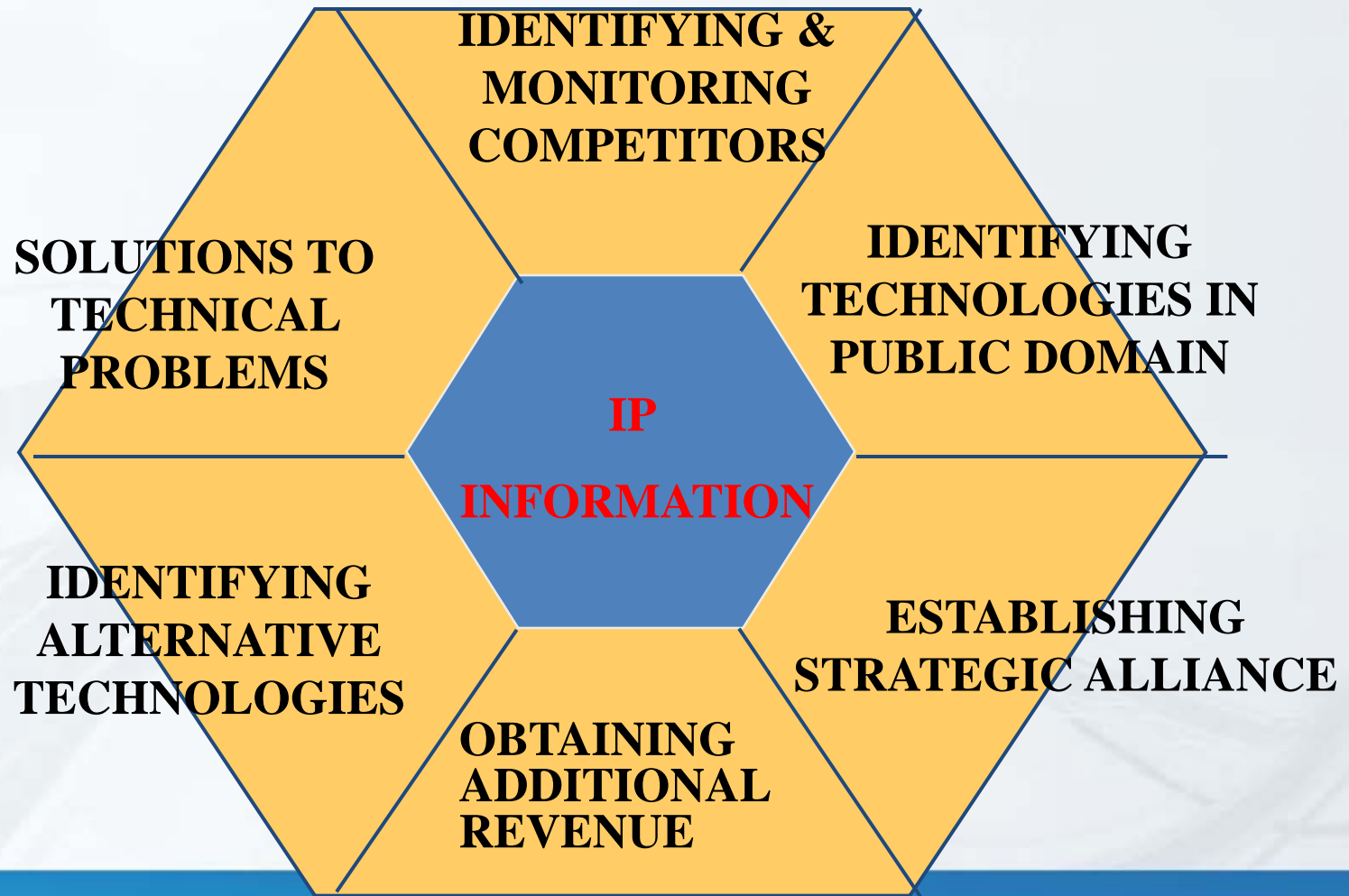


The Value of Reverse Engineering (RE)

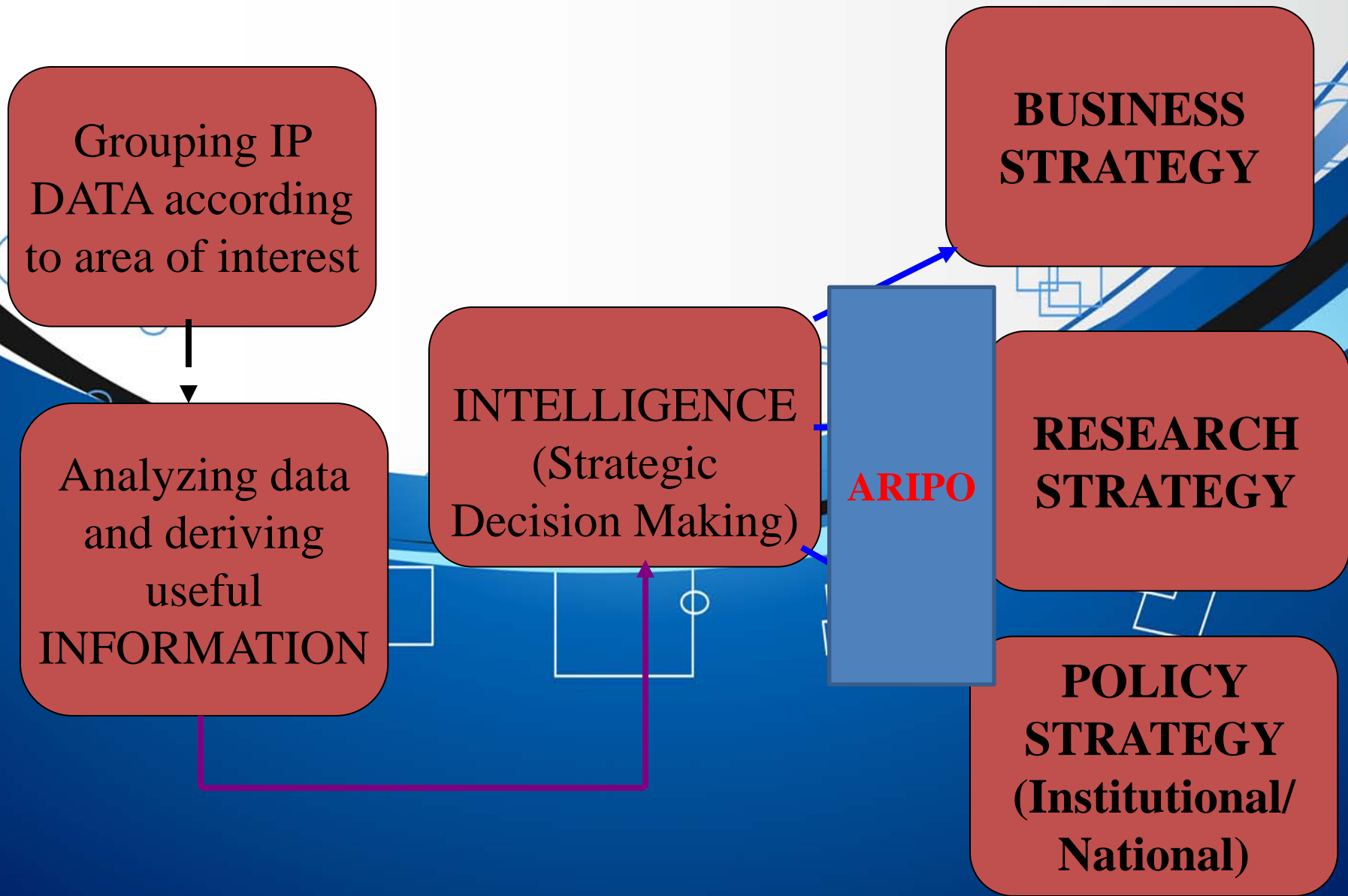
- RE is a process of dismantling an existing technology with a view to learn and copy in order to produce similar or better technology:
 - Though cumbersome and time consuming. This is the best method of using IP in Business & R&D;
 - Most Businesses and Research Institutions use RE in Developing New & Appropriate Technologies;
 - It is based on patent information;
 - Since most technologies are not protected in Africa, use of RE should be encouraged;



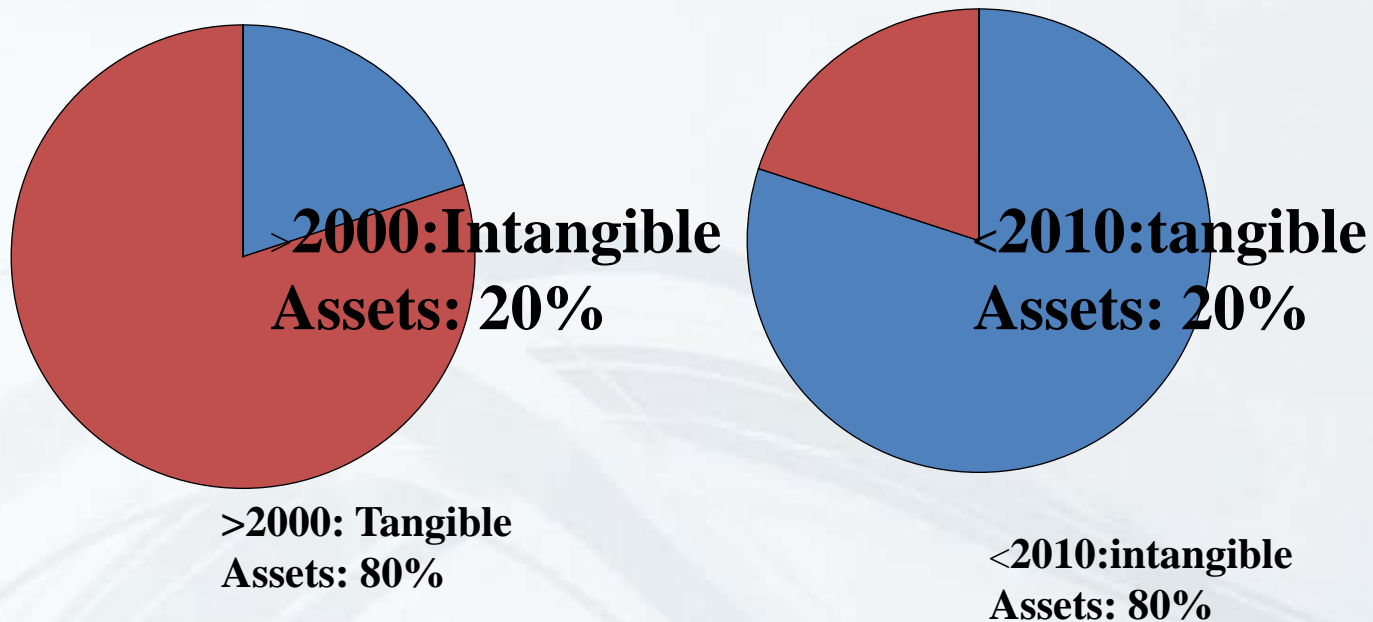
How Use IP to identify an Appropriate Business Strategy



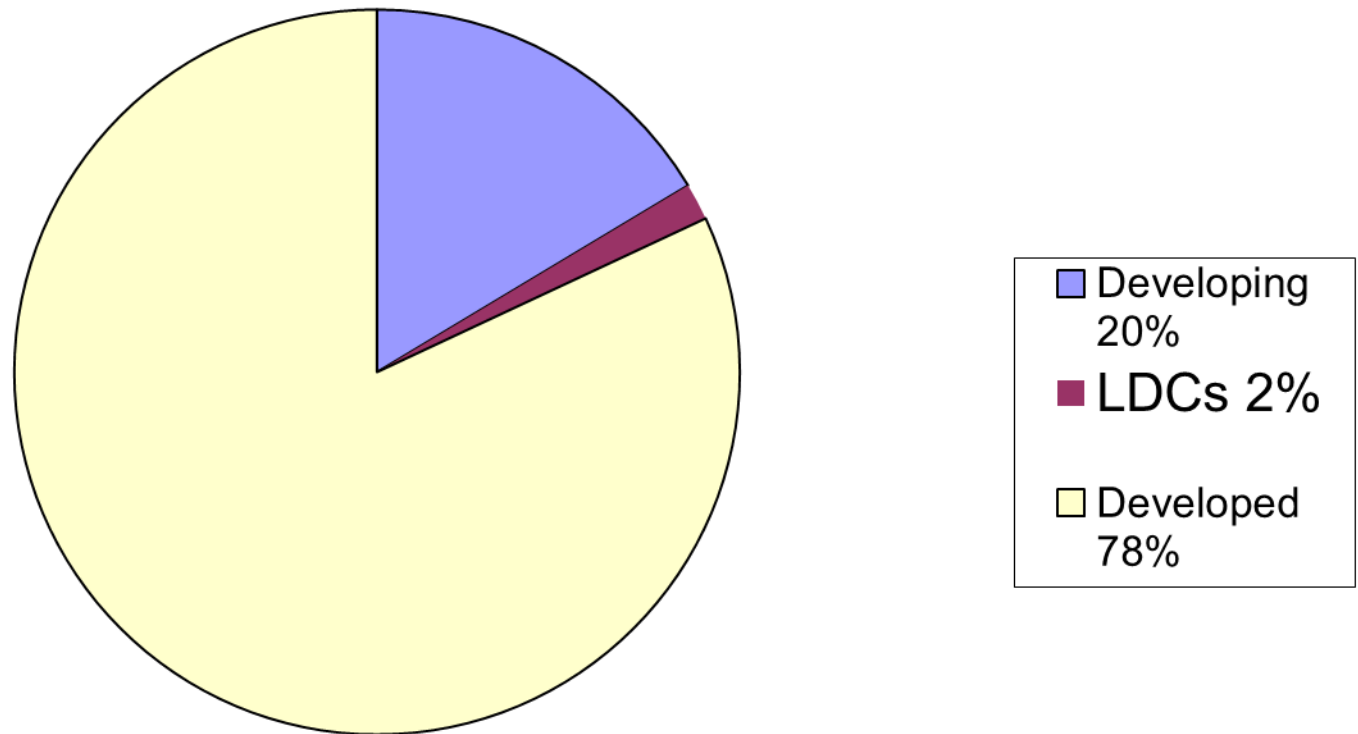
How ARIPO supports the Use of IP by SMEs & Business



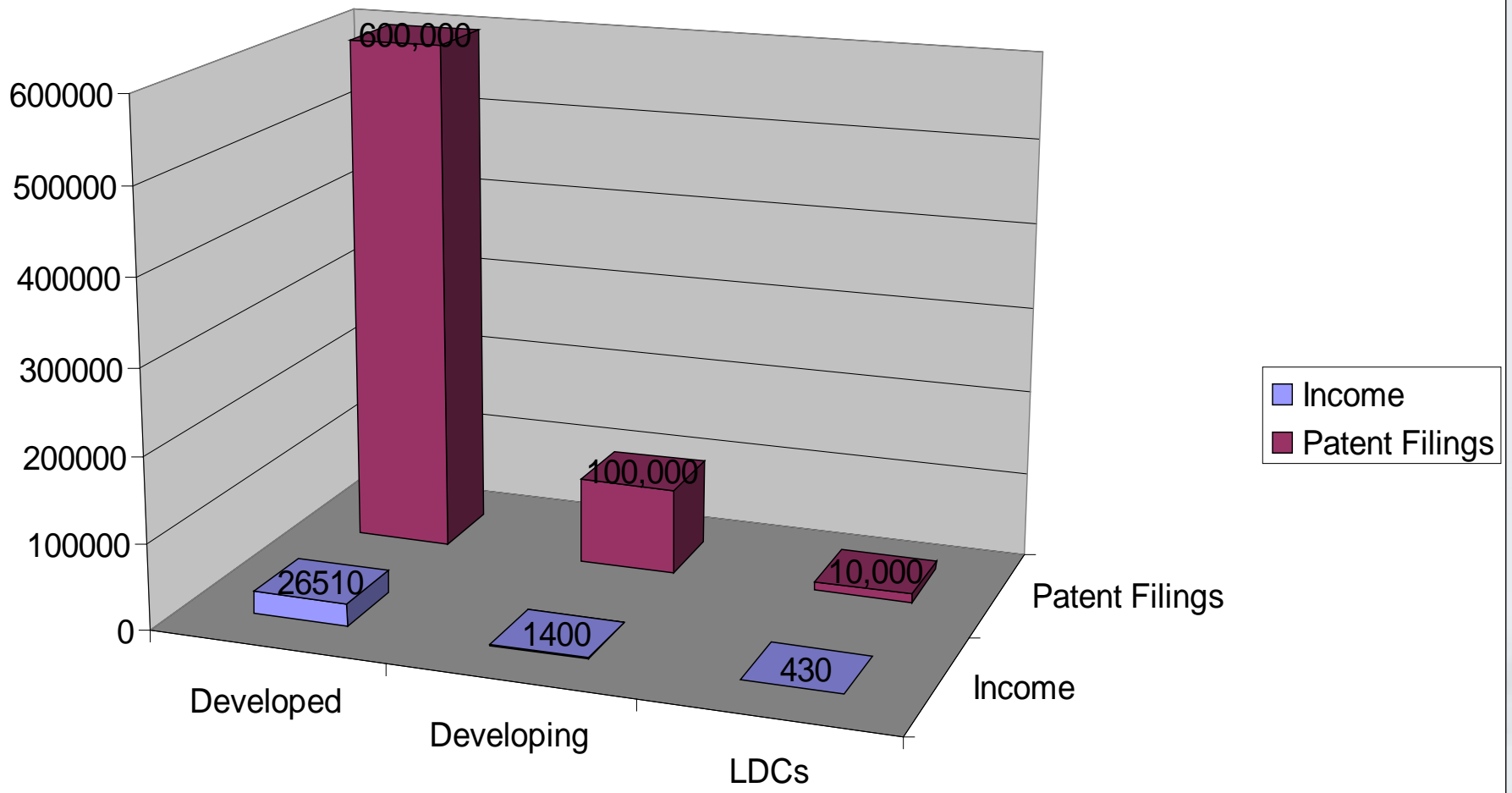
Knowledge Economy in 2010 Compared to 2000



Worldwide Patent Filings in 2010



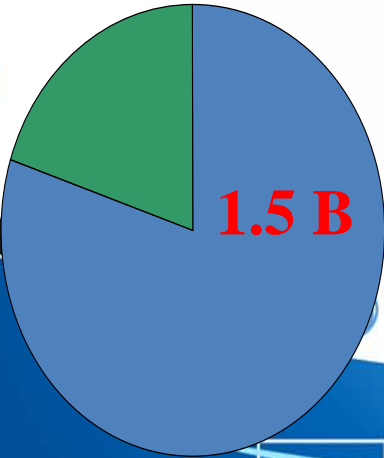
Average Per Capita Income in USD in Relation to Patent Filings



Global Economic & Income Imbalance Due to Limited Creativity & Innovation (2010)

Population (Billions)

National Income (us\$)

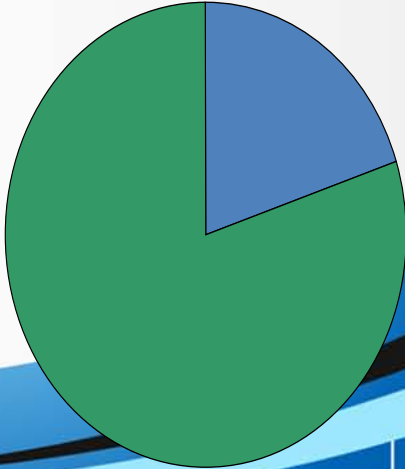


5.7 Billion

1.5 B

80%

20%



6.02 Trln

25.37 trln

20%

80%

Developing & LDCs

Industrialized

How IP has Increased Innovative Capacity in Kenya

- In March 1995, an Education & Outreach Program was launched;
- Since 1996, there has been a dramatic increase:
 - The Number of Local Patent Applications;
 - Reverse Engineered Products by SMEs/juwakali;
 - All Universities in Kenya now have IP Centers, Business Incubators & IP Policies & Linked to Industry;
 - Kenya has already adopted a national IP Policy
 - **Further, IP has been included in the National Constitution;**
 - Improved linkage between Universities, Research Institutions, Private Industry , Businesses & the National Patent Office;
 - Increased number of Local Patent Infringement cases;
 - The Public is now aware of the IP system and its benefits;



Conclusion: Why Embrace Intellectual Property

- **Is IP Directly Proportional to Development?!**
- IP encourages sharing of knowledge & Inspires Reverse Engineering & Secondary or novel creations/innovations
- **Pre Industrialization of Asian Tigers like:Japan, Korea and China Could be the best examples;**
 - These Countries took advantages of weak IP regimes to **Reverse Engineer**, copy technology and invest in local, homegrown manufacturing and Local technological base;
 - Why are we failing to do the same?!**
 - Could be due to limited diffusion of education;**
 - Limited Political will from policy makers;**
 - **Unwillingness to learn or change, etc.**





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**Making better use of Intellectual Property for business
competitiveness and development in Africa**