

FIEECE

National Centre for Flexible Electronics



Call for Expression of Interest For Low Cost Anti-counterfeiting Tags

23rd August 2015



Technology Development for Commercialization of Low Cost Anti-counterfeiting Tags



Bell Printers

Images From: Google Images

flexE
National Centre for Flexible Electronics

The Challenge

Counterfeiting: A Rampant Epidemic

The illegal business of counterfeiting eats into the revenues of legitimate business

The problem is more acute in case of **medicines** where it jeopardizes the health and well-being of patients



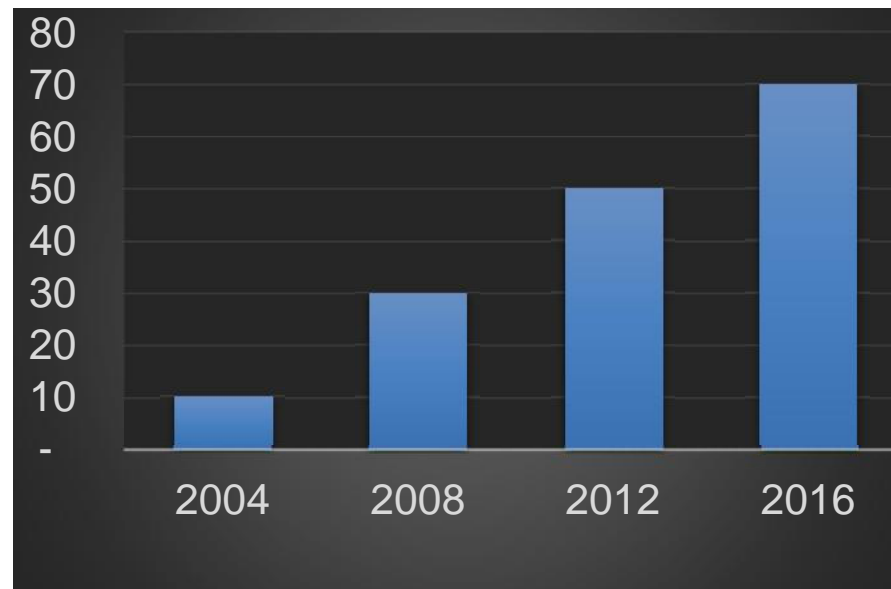
Worldwide Problem – Especially in the developing countries

World Customs Organization reported that approximately 6% of global goods are fake.

The World Health Organization (WHO) estimates that **counterfeit drugs** constitute 10 per cent of the global drug market

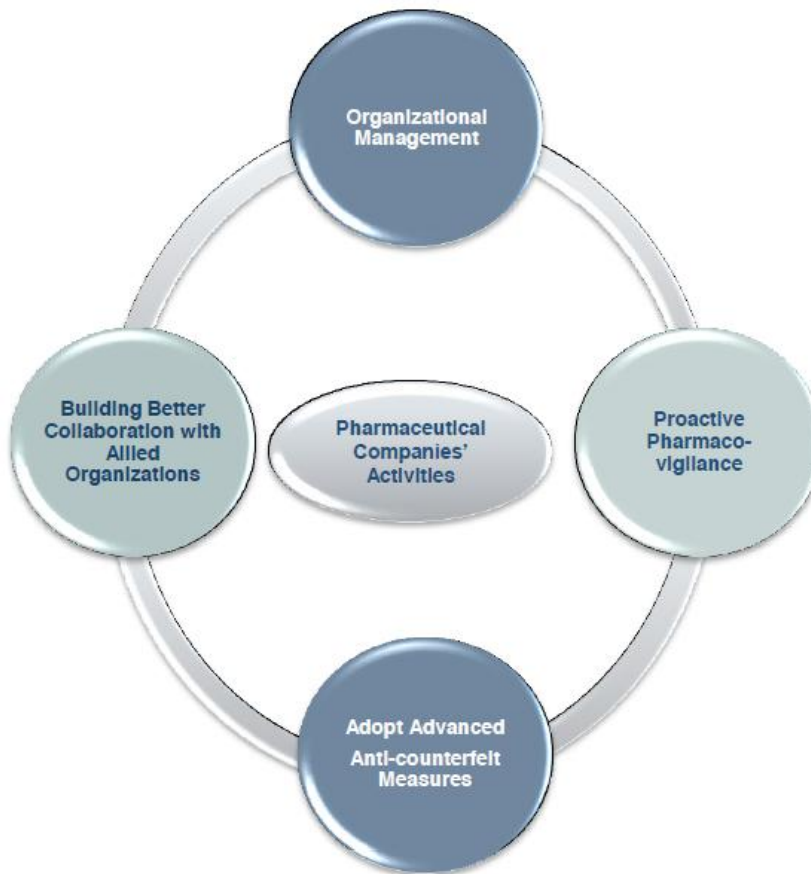
Key Trends

- The loss of revenues to pharmaceutical companies is expected to be around \$70B per annum due to counterfeiting



Source:
Frost & Sullivan

Key Trend – Measures for Anti-counterfeiting



Adopting advanced anti-counterfeiting measures is a key activity area for pharmaceutical companies as part of the Pharmaco Vigilance program

Source:

FROST & SULLIVAN

By 2017, the global anti-counterfeit market is forecasted to reach \$1B

The Current Technology Options

There are many anti-counterfeiting technologies available with a wide range of cost effectiveness, complexity and levels of security

Overt Technologies	Visible features such as holograms
Covert Technologies	Hidden features, identifiable by specialized detectors
Forensic Technologies	Hidden features, identifiable under special environment/testing methods
Track and Trace Technologies	identity marker to trace history and store details like expiry date etc.
Other Technologies	Combination of two or more of the above mentioned technologies

Innovative Solution and Implementation



• Proprietary 3-D physical and random structures monolithically integrated with the product

• Digitization and encryption of the structures

• Printing of the encrypted image

• No databases. Local verification with camera phone by end user

Affordable and easy to implement technology solution

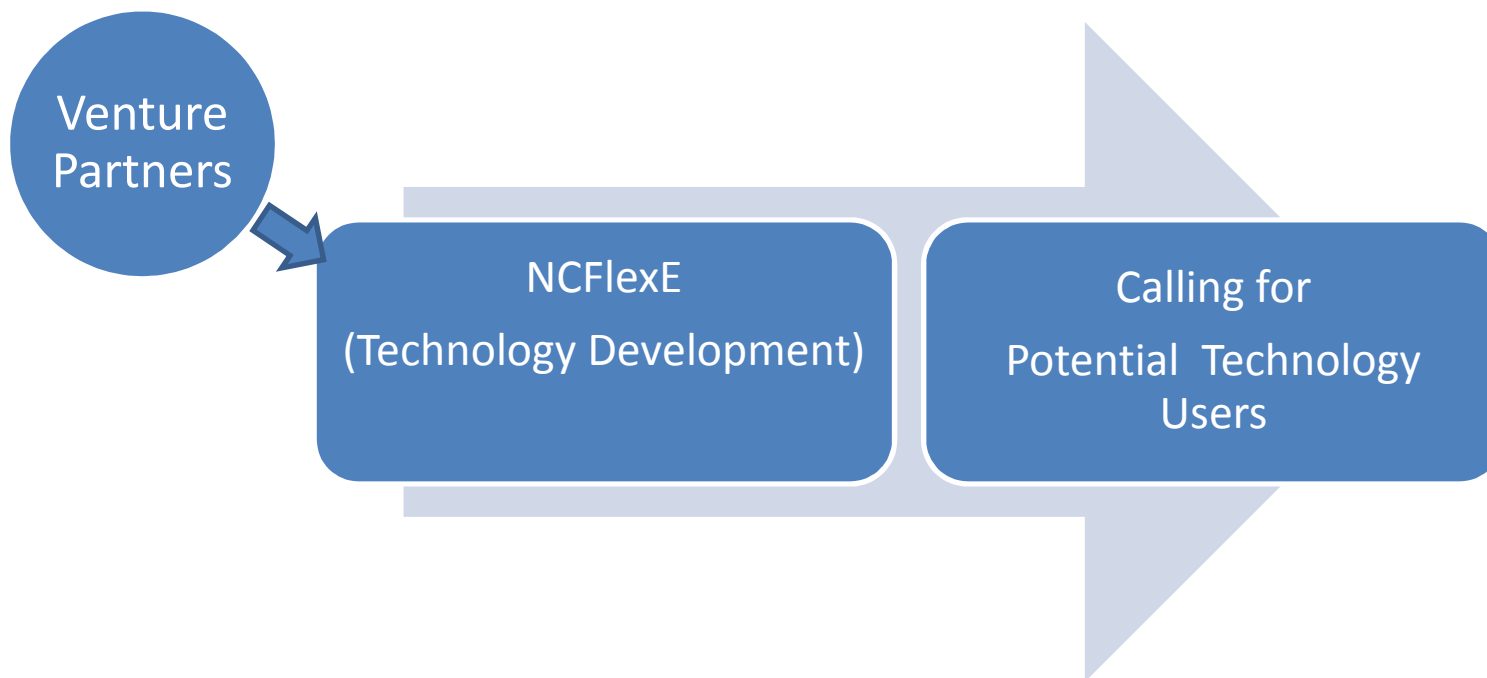
Advantages of proposed solution

- Affordable and really low cost solution
- Verification is at the hands of the user
- Does not require special or complex detection devices or communication networks
- Low capital investment

The alternate technologies have not been successful in implementations due to the complexity of technology, cost and available infrastructure

The level of security, ease of implementation, cost of the solution and authentication at point of use are key success factors

Call for Partners



If you are potential user of technology, we invite you to participate at development stage with benefit of preferential terms of exploitation.

Contact Information

Dr. Sudhindra Tatti
Chief Operating Officer,
National Centre for Flexible Electronics,
Indian Institute of Technology Kanpur.
statti@iitk.ac.in

Prof. Monica Katiyar
Co-ordinator, National Centre for Flexible
Electronics,
Indian Institute of Technology Kanpur.
mk@iitk.ac.in

Also visit our webpage for more details on partnership models and other technology domains: www.ncflexe.in