

Climate-smart Public Financial Management MENA Conference

February 26–29, 2024
Cairo, Egypt



The Maker Movement: A Catalyst for Climate Change Solutions

Lamiaa Nail

Education Manager - San3a Tech

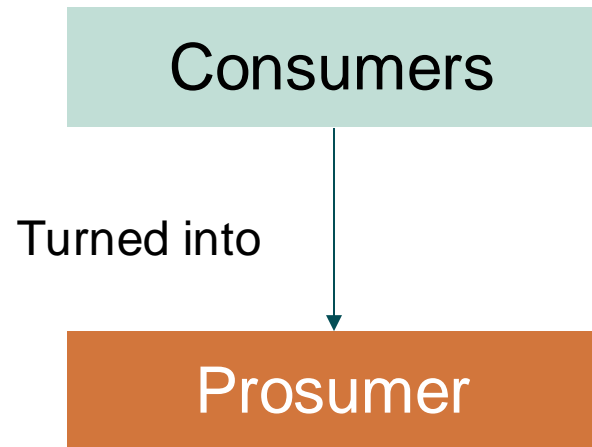


Climate-smart Public Financial Management MENA Conference
February 26-29, 2024 | Cairo, Egypt



The Maker Movement: Overview

The maker movement is a cultural trend that encourages individuals to create, innovate, and learn through the process of making, often with technology.



The Solar House

The Maker Movement: Characteristics

The Maker Movement

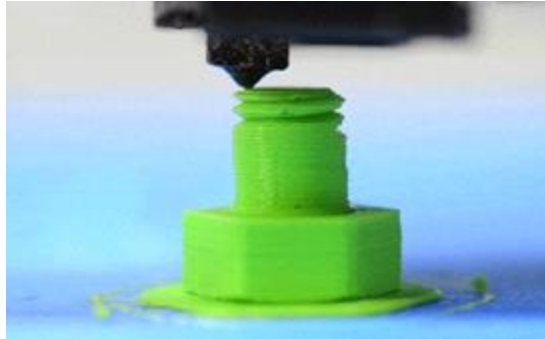
- .. is driven by a community (grassroots),
- .. tackles social and environmental issues,
- .. emphasizes mindset and culture,
- .. and is powered with low and high Tech



The Solar House

The Maker Movement: Technology Tools

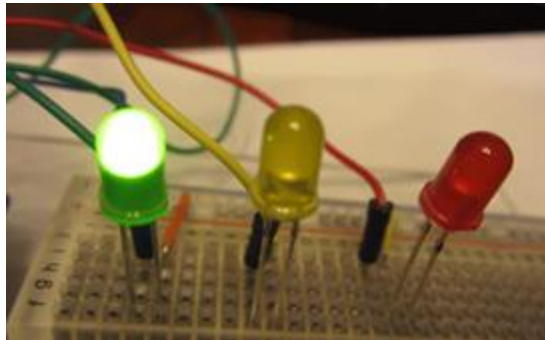
- Laser Cutting
- 3D Printing
- 3D Scanning
- Vinyl Cutting
- Digital Moulds
- Electronics
- Programmable Boards
- Computer-aided design
- and more...



3D Printing



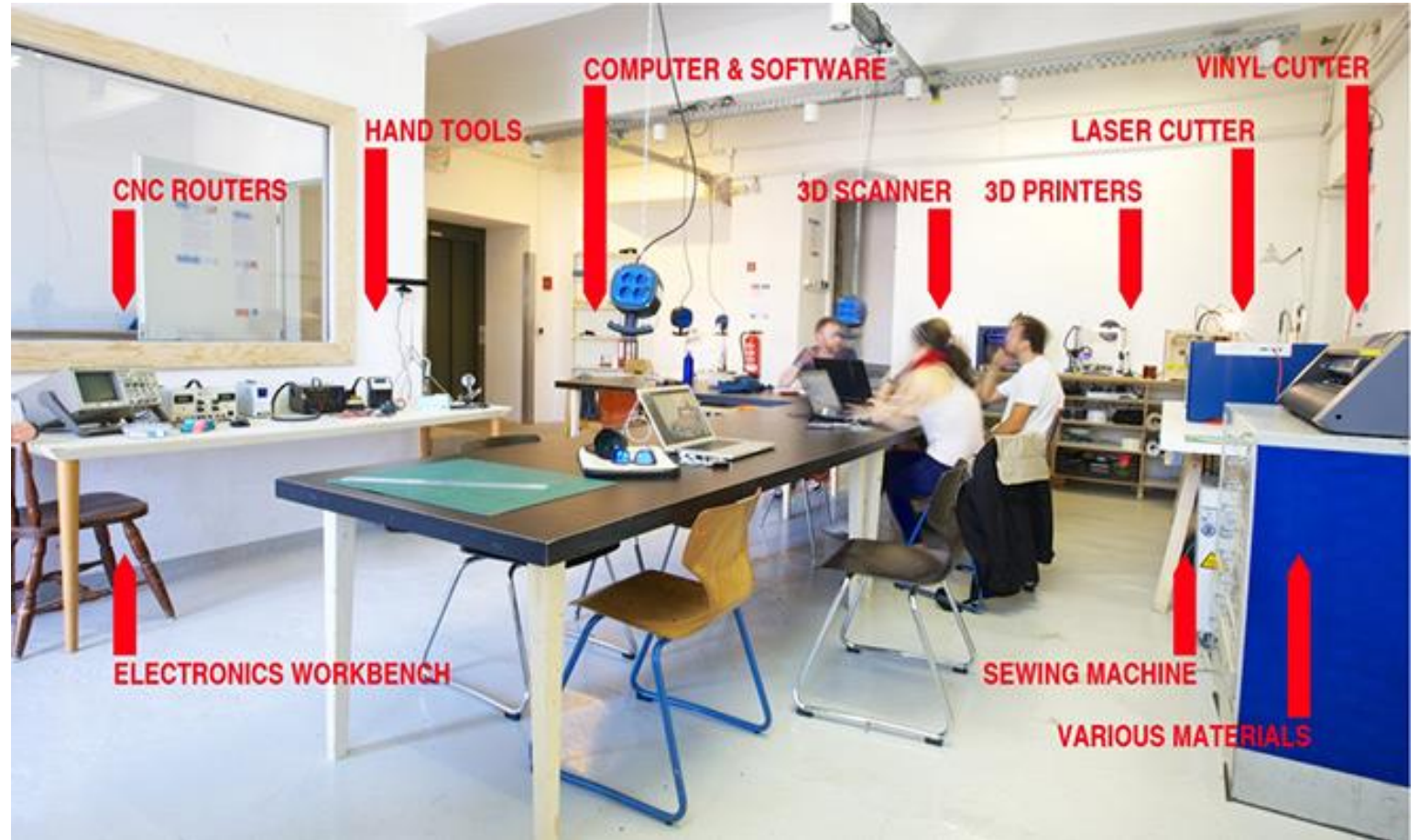
Laser Cutting



Electronics & Programming

The Maker Movement: Technology Tools

Makerspace
(a.k.a Fab Lab)



The Maker Movement: Technology Tools



Climate-smart Public Financial Management MENA Conference
February 26-29, 2024 | Cairo, Egypt



THE WORLD BANK
IBRD - IDA | WORLD BANK GROUP

Financial Management

San3a Tech: Powering the Maker Movement in Egypt



How does the maker movement contribute to climate action?



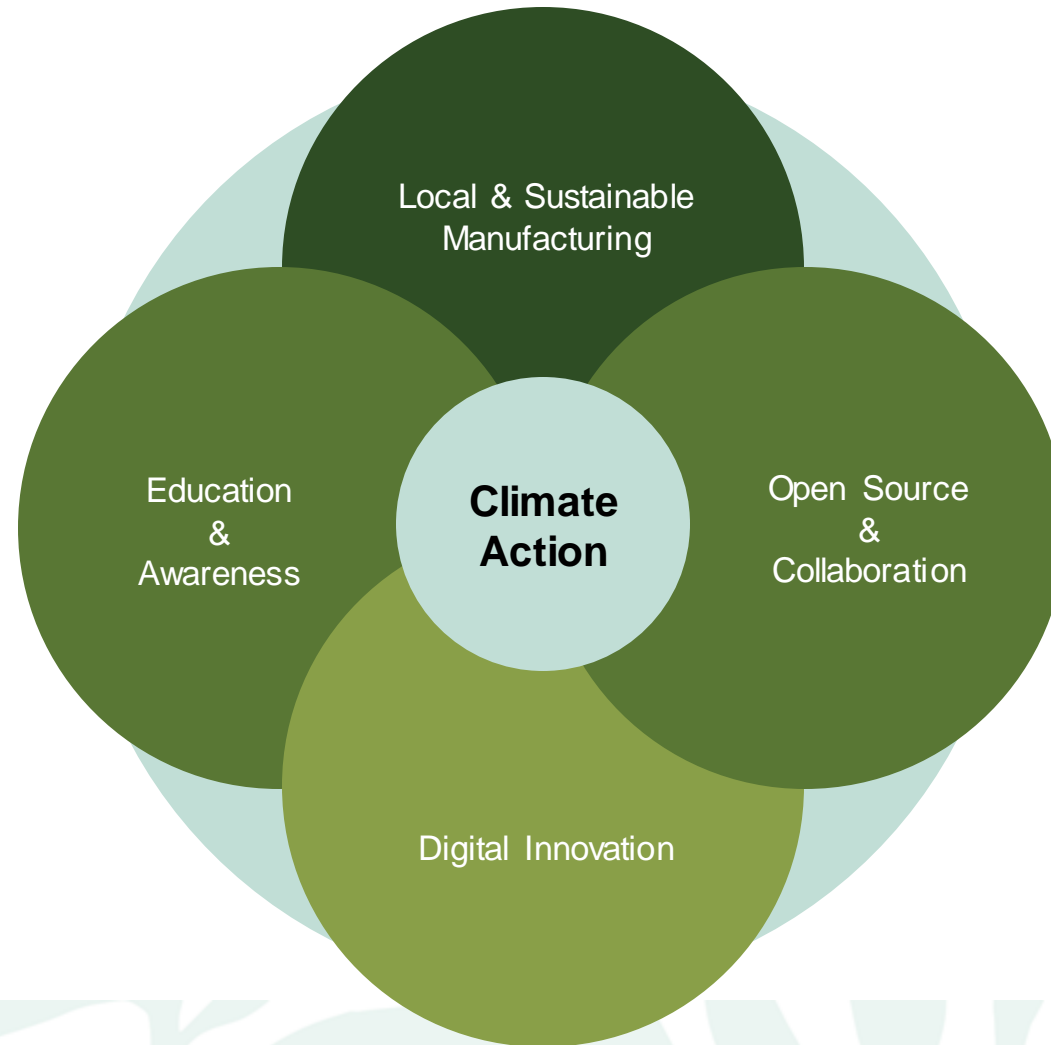
Climate-smart Public Financial Management MENA Conference
February 26-29, 2024 | Cairo, Egypt



THE WORLD BANK
IBRD - IDA | WORLD BANK GROUP

Financial
Management

The Maker Movement in Egypt: Towards Climate Action



Sustainable Manufacturing towards Climate Action

Reblox: Turning Waste into Buildings



Sustainable Manufacturing towards Climate Action

Plastale: Turning Waste into Furniture



Sustainable Manufacturing towards Climate Action

Cavani Textiles: Turning Waste into Eco Fibers and Dyes



Open Source towards Climate Action

VeryNile: Utilizing open source technology to create useful products



Plastic Shredder Machine
(Precious Plastic)



Plastic Injection Machine
(Precious Plastic)

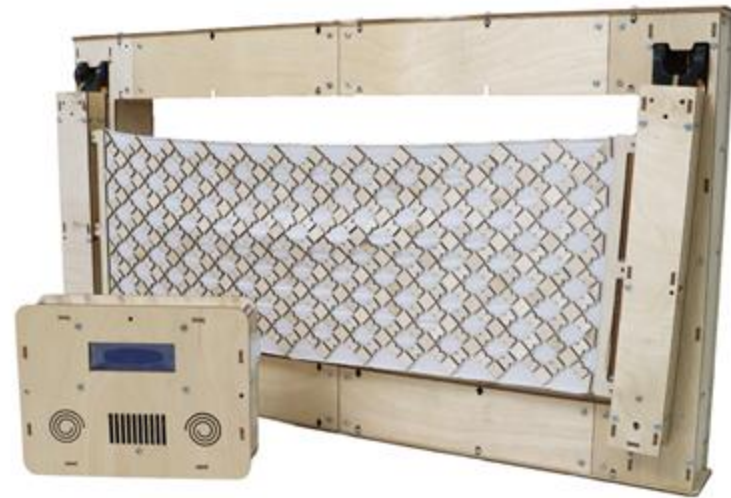


Digital Innovation towards Climate Action

Maker Diploma: From ideas to smart prototypes



Green Energy
Smart Solar Trackers



Environmental Architecture
Smart Window Shade
(Mashrabiya)



Sustainable Agriculture
Smart Greenhouse

Maker Education towards Climate Action

Maker Classroom: Raising awareness in schools through E-textiles & Storytelling



E-Textiles = Textiles + Smart Electronics



Climate-smart Public Financial Management MENA Conference
February 26-29, 2024 | Cairo, Egypt



THE WORLD BANK
IBRD - IDA | WORLD BANK GROUP

Financial Management

Conclusion

The Maker Movement empowers citizen to be active participants in climate action by enabling local manufacturing, promoting open source and collaboration, fostering digital, and innovation facilitating education and engagement



THANK YOU

Contact:

Lamiaa Nail

Education Manager, San3a Tech

lamiaa.nail@san3atech.com



Climate-smart Public Financial Management MENA Conference
February 26-29, 2024 | Cairo, Egypt



THE WORLD BANK
IBRD - IDA | WORLD BANK GROUP

Financial
Management