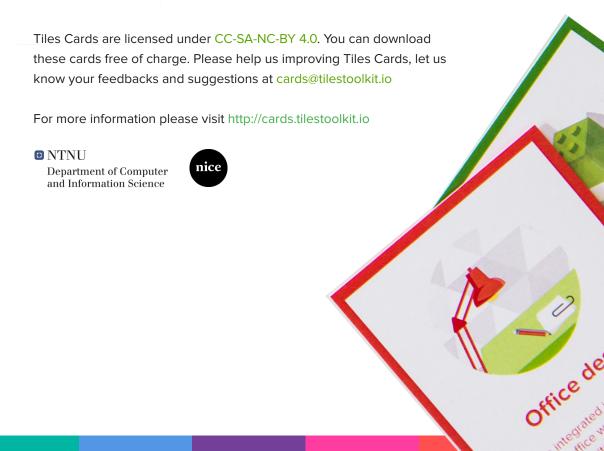
## Introduction

Tiles Cards have been created to inspire ideas for new Internet of Things products by fostering creative and collaborative thinking. Four sets of primitive cards inspire combinations of IoT components like everyday things, user interface elements, sensors and internet services. Divergent thinking is supported by mission cards, twenty provocative design missions centred on human needs and desires. Finally, criteria cards help converging and formalizing ideas by providing arguments to reflect and evaluate design outcomes. For each category we provide custom cards that can be personalised by end-users.

Tiles cards can be used by non-experts like kids, artists and makers with a number of idea generation techniques. The cards can be coupled with traditional participatory design techniques such as scenarios and personas and followed by prototyping explorations.

In the following we provide a simple playbook you can start with, but you can experiment with using the cards in different ways. We also offer a workshop package to learn about the Internet of Things and use Tiles Cards to design technology to solve real-world problems; please contact us at workshop@tilestoolkit.io



# **Playbook**



## 1 Choose your mission

Missions cards propose twenty provocative design missions centred on human needs and desires. They aim at triggering design thinking by establishing a creative dialogue among players.



# Explore and compose everyday things, digital services and user interfaces



There are different categories of cards that describe aspects of how an object can look, feel and respond. Combine these cards to form ideas for augmented objects to solve your mission.



**Things** cards suggest a set of everyday, low-tech things. These are the objects that can be augmented with technology to become connected and interactive.



**Data channels** cards list popular services or apps that can communicate with the objects, either to provide them with data that trigger an action, or to receive data from the object.

**Human Actions** and **Feedback** cards describe how people can interact with augmented things and how the things communicate information back to the user.



## 3 Sketch out your idea

Use pen and paper to sketch out your idea. Describe how the augmented object is used and what values bring to the users,



## 4 Reflect and improve

Criteria cards help users to reflect and evaluate their design outcomes by looking at their ideas through a set of nine critical lenses, acting as triggers for collaborative reflection. Criteria encourages trade-offs discussions and enable finding inspiration for future design iterations.

## **Contents**



## Missions cards

#### 21 cards in total

M1 - Custom mission	M8 -Transactions	M15 - Tangibles
M2 - Trojan Horse	M9 - Immortality	M16 - Sixth sense
M3 - Coded Information	M10 - In the Mood	M17 - Safekeeping
M4 - Habit Changing	M11 - Omniscience	M18 - Super shopper
M5 - Social Interaction	M12 - Obstacles	M19 - Big Brother
M6 - Enjoyable Objects	M13 - Feeling blue?	M20 - Telepathy
M7 - Time-saver	M14 - Teleportation	M21 - Expression



## Things cards

#### 25 cards in total

T1 - Custom thing	T10 - Refrigerator	T19 - Sports equipment
T2 - Bike	T11 - Office desk	T20 - Plant
T3 - Wallet	T12 - Shoe	T21 - Jewelry
T4 - Watch	T13 - Headgear	T22 - Medication
T5 - Eyewear	T14 - Camera	T23- Pets
T6 - Keychain	T15 - Piggy bank	T24 - Stove
T7 - Pen or pencil	T16 - Furniture	T25- Shower
T8 - Luggage	T17 - Coffee cup	
T9 - Clothing	T18 - Umbrella	



## Human actions cards

#### 9 cards in total

A1 - Custom action	A4 - Drop	A/ - Location chang
A2 - Rotate	A5 - Lift	A8 - Tap
A3 - Shake	A6 - Tilt	A9 - Proximity



## Feedback cards

#### 9 cards in total

F1 - Custom feedback	F4 - Text	F7 - Blink
F2 - Emoji	F5 - Sound	F8 - Vibrate
F3 - Motion	F6 - Color change	F9 - Shapeshift

## **Contents**



## Data channels cards

#### 25 cards in total

D1 - Custom channel D-10 Cloud documents D19 - News and sports D2 - Health and fitness D20 - Alarm D11 - Maps D3 - Mail D12 - Calendar D21 - Car D4 - Bank account D13 - Stocks D22 - Public webcam D23 - Marketplace D5 - Weather D14 - Traffic D6 - Twitter D15 - Public transit D24 - Smart speaker D7 - Instagram D16 - Storage D25 - Smart home D8 - Facebook D17 - Messages

D18 - Music



## Criteria cards

#### 10 cards in total

D9 - To-do list

C1 - Custom criteria C5 - Attraction C9 - Market potential C2 - Innovation C6 - Creativity C10 - Sustainability C3 - Enjoyment C7 - Feasibility C4 - Utility C8 - User friendly