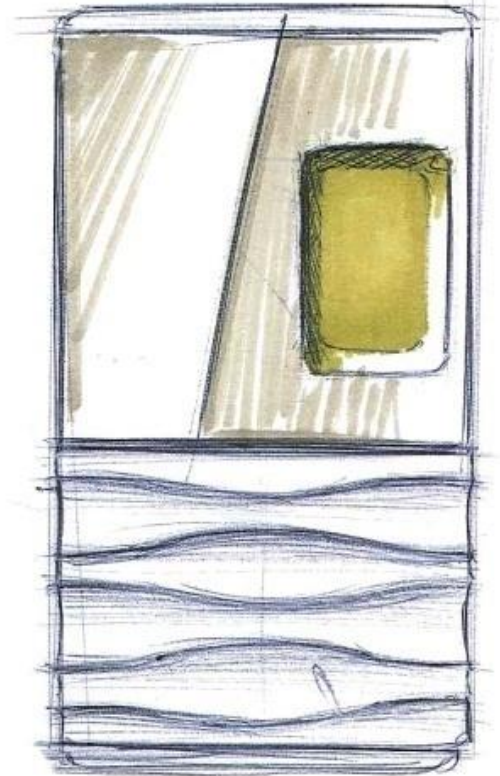
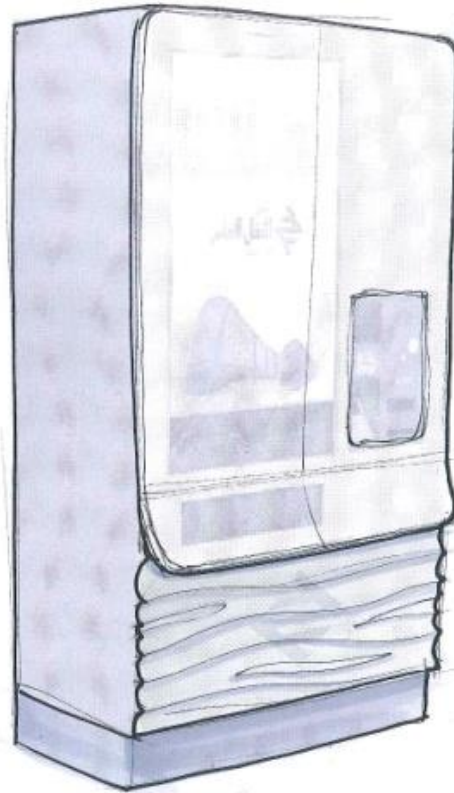




**indra**



**Automatic Fare Collection System**

# **SUPPLIER CONFERENCE REGARDING TICKET VENDING MACHINES**

**MAY 23<sup>RD</sup>, 2016**



## CONTENTS

**DESIGN PREMISES**

**COST-EFFICIENCY**

**OWNERSHIP AND OPERATING  
MODEL HARDWARE APPROACH**

**FUNCTIONALITIES**

**CONCEPT**

# HOW CAN RUTER MAINTAIN A COST EFFICIENT TVM CHANNEL WITH A SMALL AND DECLINING SHARE OF THE SALES?

1. WHAT ARE THE KEY DESIGN ISSUES TO ADDRESS THIS CHALLENGE?
2. WHAT ARE THE KEY OPERATIONAL/LIFE-CYCLE ISSUES TO ADDRESS THIS CHALLENGE?

## DESIGN PREMISES

- **NEW AESTHETIC APPROACH** WILL AFFECT THE EQUIPMENT THAT WILL BE IN STRAIGHT VISUAL CONTACT WITH USERS.
- **LARGE VISUALS AND TOUCH SCREEN** TO PROVIDE FURTHER **FUNCTIONALITIES**
- **REDUCE TO MAXIMUM MECHANICAL ELEMENTS**
- **ELIMINATE CASH PAYMENTS**
- **LIMIT ITS USE FOR INDOOR PREMISES**
- **STRATEGIC LOCATIONS**

# HOW CAN SUCH A COST EFFICIENT TVM CHANNEL STILL BE FLEXIBLE AND ADAPTABLE, WITHOUT DRIVING COST UPWARDS?

1

## IMPLEMENTATION OF ONE-STOP SHOP SERVICE CONCEPT

*For information, vending, advertising*

- ONE STOP SHOP SYSTEM, INTEGRATING PAYMENT OPTIONS, INFORMATION AND ADVERTISING FUNCTIONALITIES
- ABLE TO PROVIDE TICKETS AND SMART CARDS. CAN SOLVE ALL THE CUSTOMER REQUIREMENTS

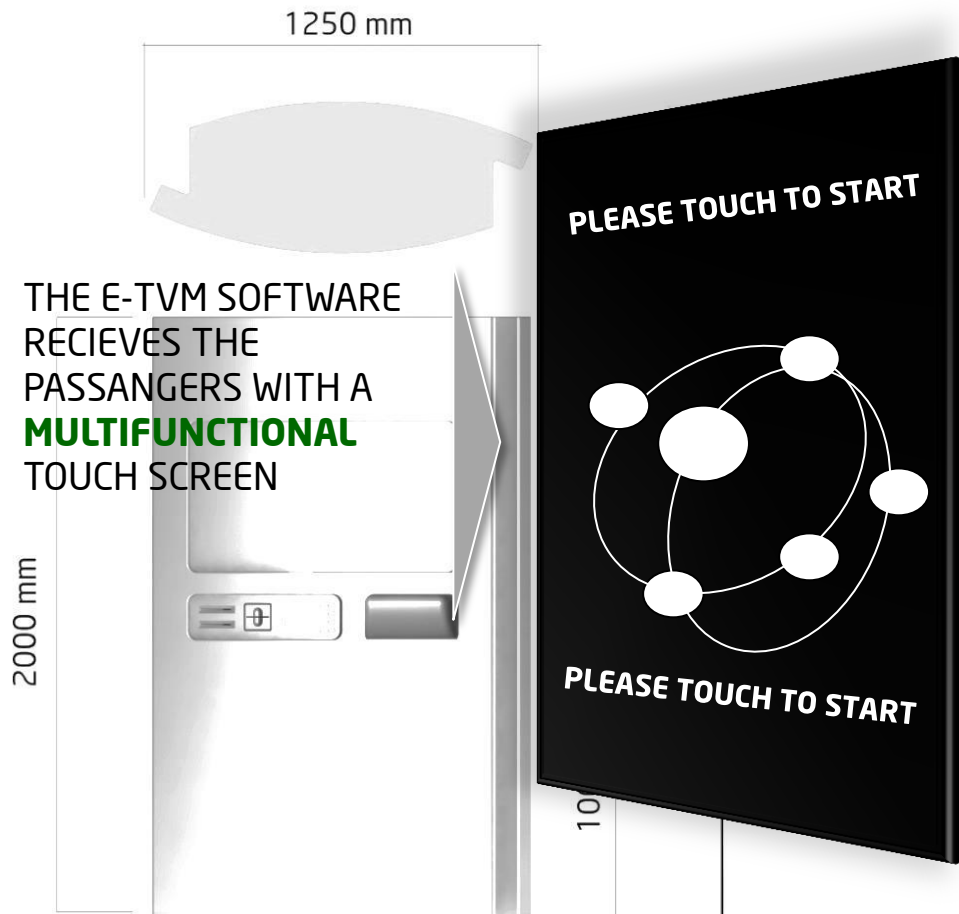
2

## IMPLEMENTATION OF AN OPEN SPACE FOR CUSTOMERS

*Flexible, adaptable, comfortable*

- INNOVATIVE SHAPED HARDWARE, PERFORMING A SIZED TACTILE TOUCH SCREEN, MULTIFUNCTIONAL AND MULTIUSER
- BUSINESS LOGIC TO BE IMPLEMENTED OUT-OF-THE-MACHINE
- ADAPTABILITY FOR NEW FUNCTIONALITIES: OPEN OPERATING SYSTEM

# DESIGN CRITERIA FOR SOFTWARE: THE ONE-STOP SHOP SCREEN



## SYSTEM CONCEPTUALIZATION:

ONE STOP SHOP SYSTEM, INTEGRATING PAYMENT OPTIONS, INFORMATION AND ADVERTISING FUNCTIONALITIES

ABLE TO PROVIDE TICKETS AND SMART CARDS. CAN SOLVE ALL THE CUSTOMER REQUIREMENTS

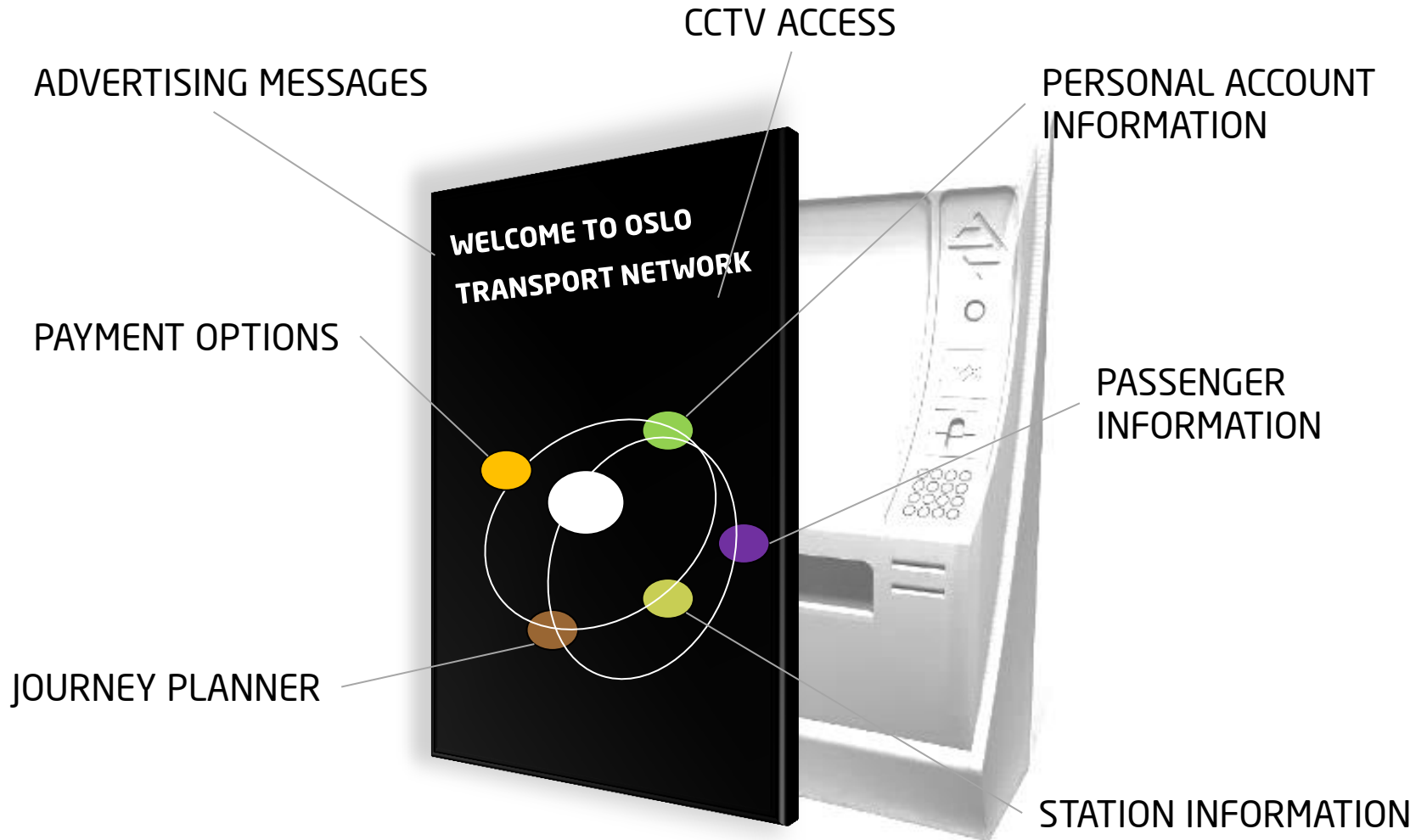
## SYSTEM FUNCTIONALITIES:

- PAYMENT OPTIONS
- STATION INFORMATION
- JOURNEY PLANNER
- PERSONAL ACCOUNT INFORMATION
- PASSENGER INFORMATION
- GENERAL INFORMATION
- ADVERTISING

# OWNERSHIP AND OPERATING MODELS

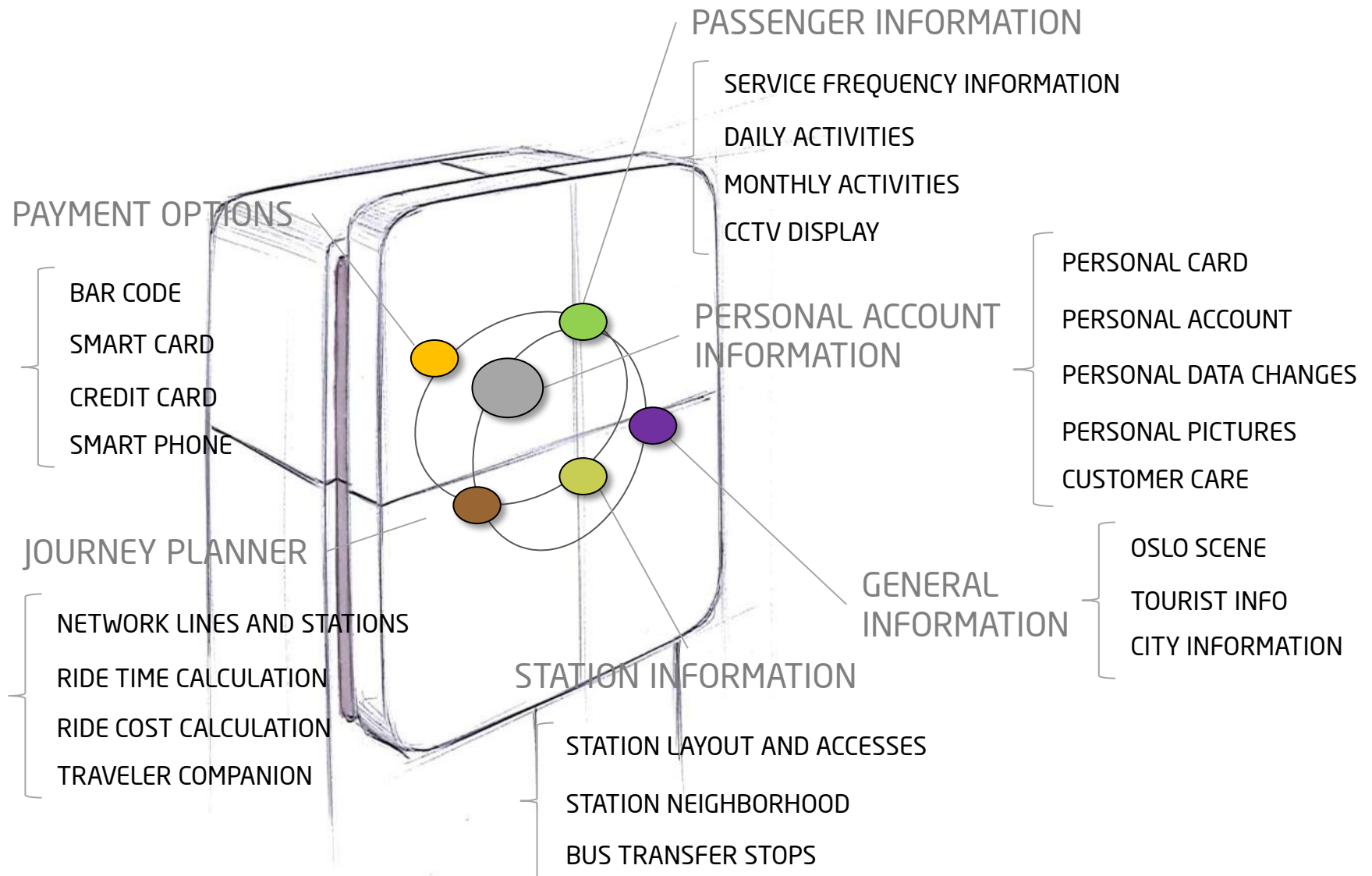


# FUNCTIONALITIES OF THE TOUCH SCREEN





# DETAIL OF SYSTEM FUNCTIONALITIES





# RIYADH METRO EXAMPLE

**TOUCH SCREENS AND BOX SHAPED THAT CAN BE EASILY IMPLEMENTED IN THE SHORT TERM**

