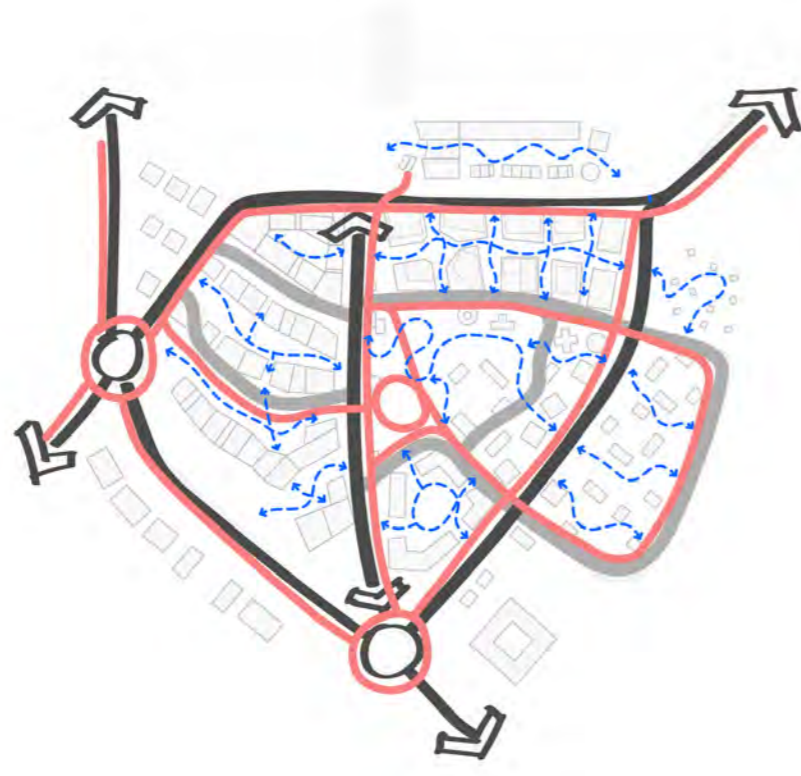
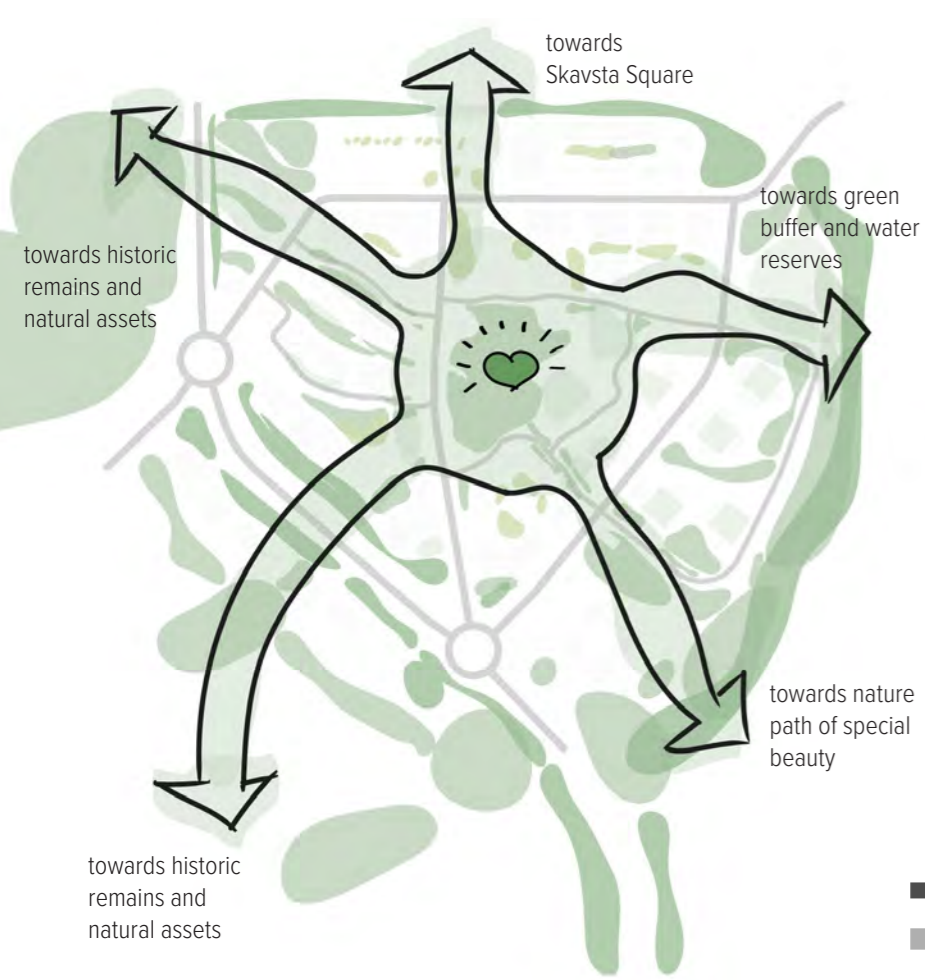


## Design Evolution - Nature First



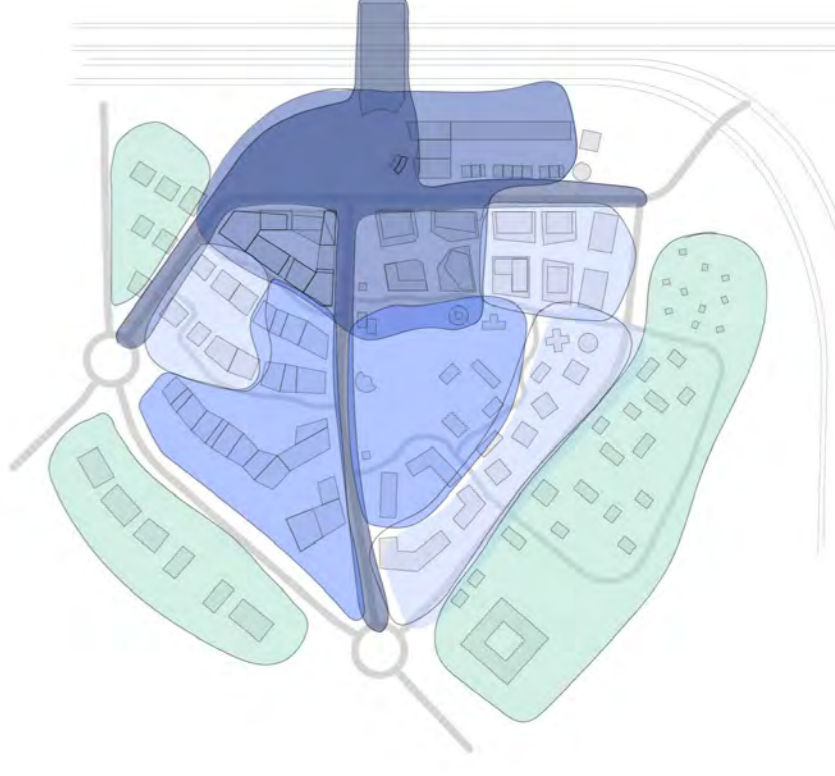
- ROUTES**
- main vehicular routes
  - shared space
  - cyclist routes
  - - - pedestrian routes



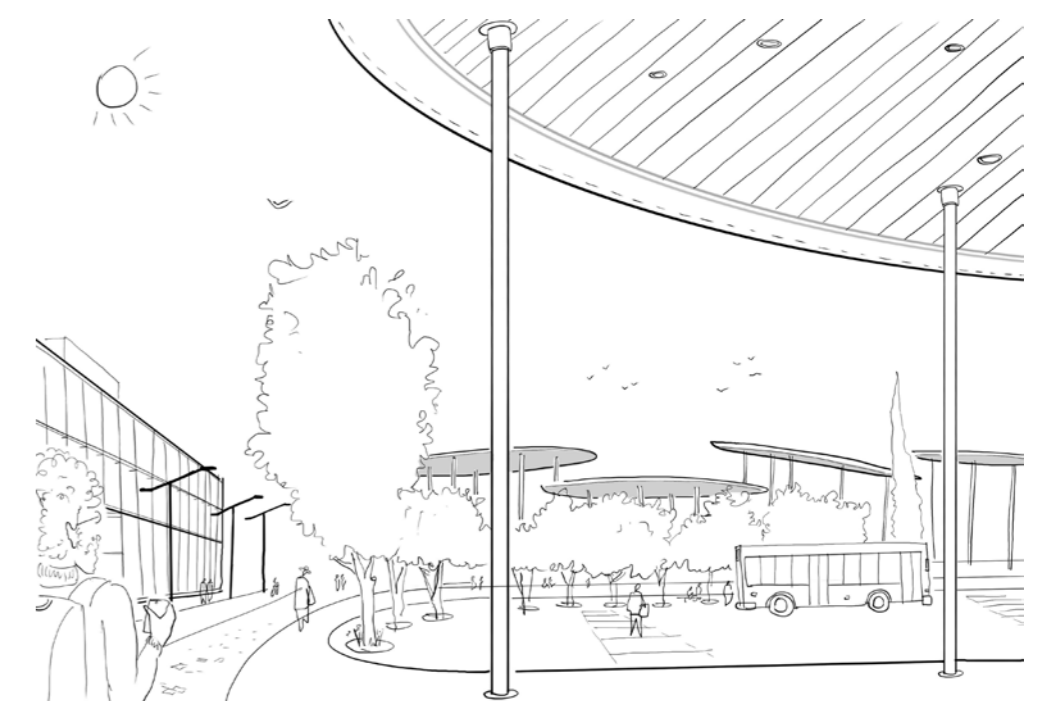
- BUSINESS ECOSYSTEMS**
- energy
  - food
  - material
  - innovation hub
  - information



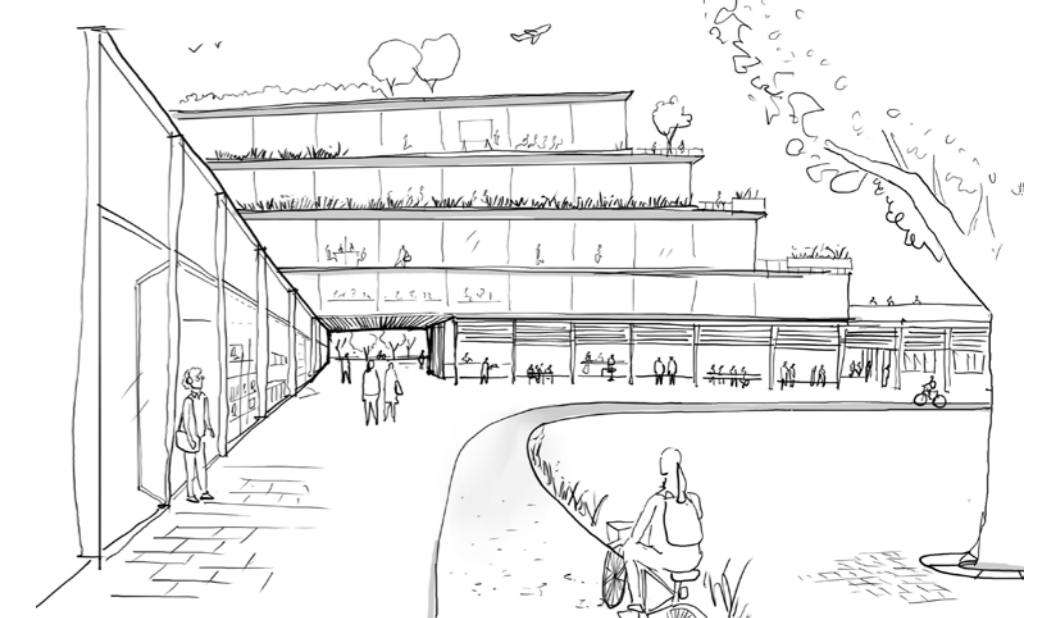
- BUILDING HEIGHTS**
- 6-8 floors
  - 4-6 floors
  - 2-4 floors
  - 1-2 floors



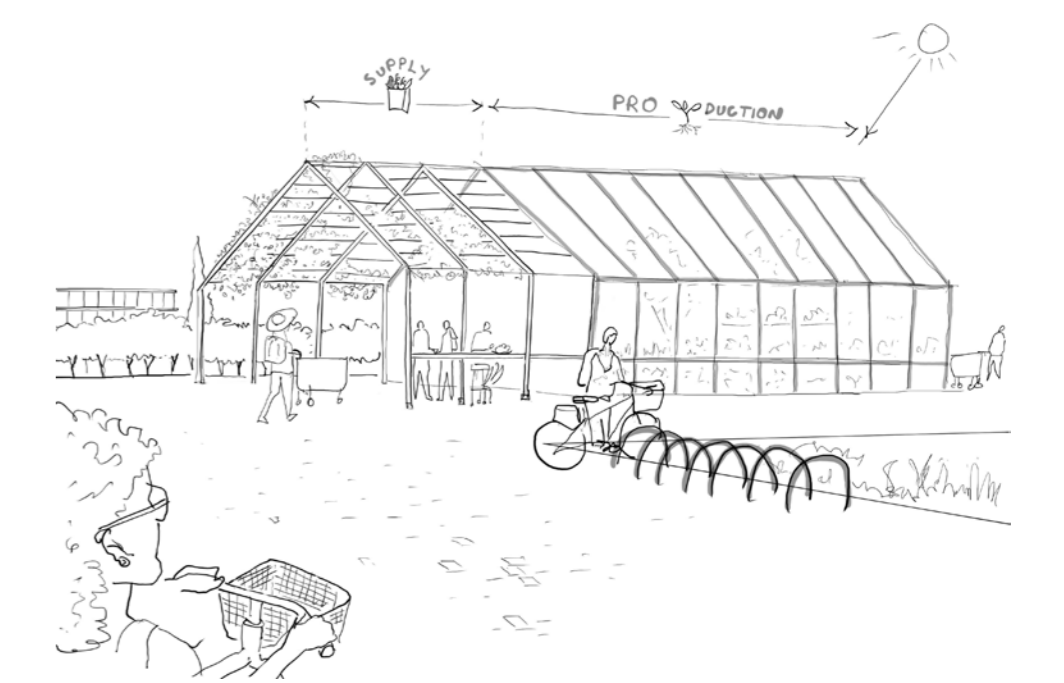
- PHASES**
1. Infrastructure
  2. Creating a centre
  3. Build along the boulevard
  4. Expand in the site
  5. Expand out of the site



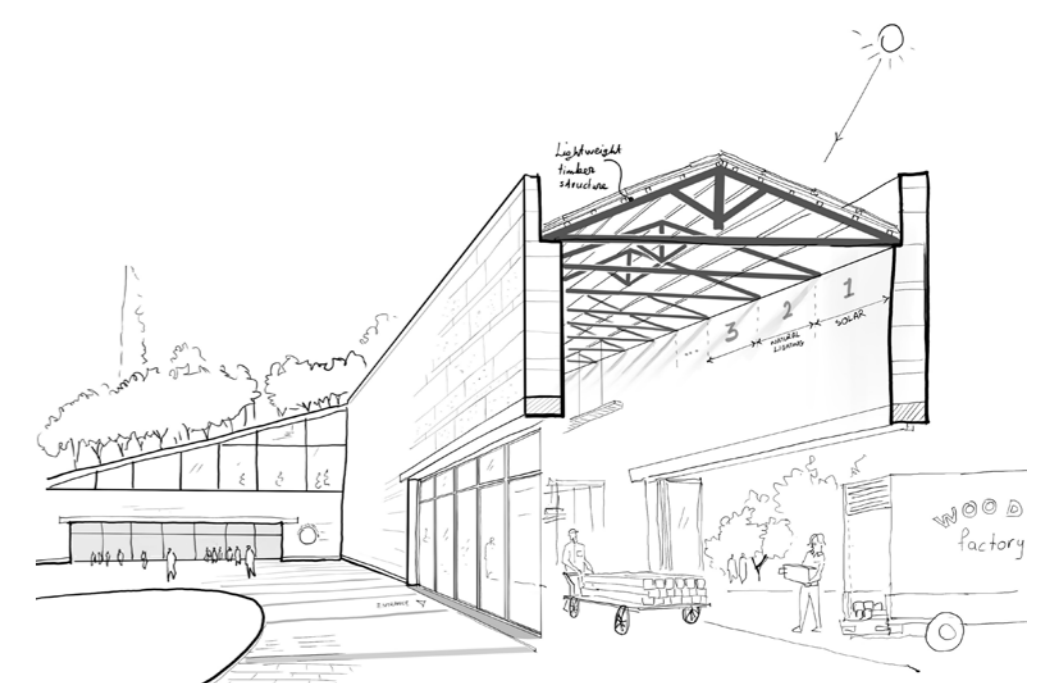
**Skavsta Bus Station**  
Skavsta Train Station building connects with the platforms of the adjacent Skavsta Bus Station via a sequence of playful ellipsoid canopies that rise in different heights. The platforms include all the needed bus stops (local buses, replacements, etc) and are easily accessible to all, with clear linear arrangement, covered waiting areas and buffer planting.



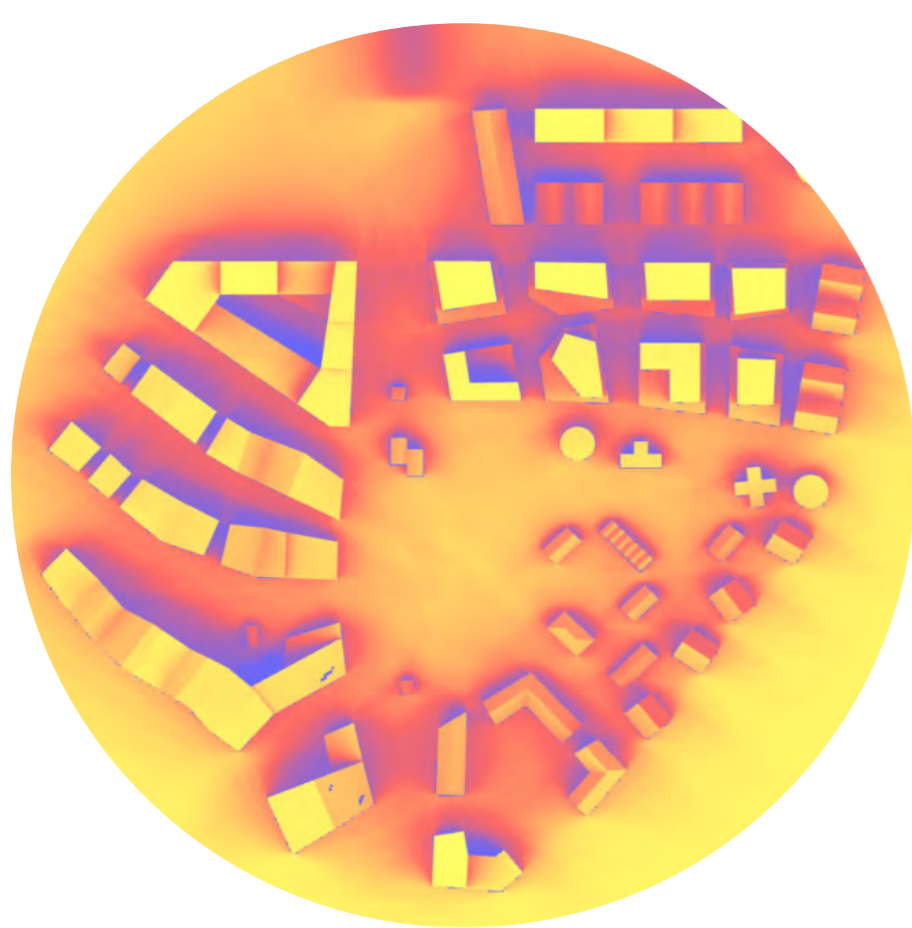
**Innovation Starts here!**  
Located strategically in front of Skavsta Square, the Innovation Hub includes start-ups incubators, accelerators for young businesses, co-working spaces, as well as collaboration rooms, labs and events spaces, activating the ground floor. It is a complex dedicated for a new generation of entrepreneurs who focus on the circular economy, sustainable food, diversity & inclusion and green tech. The Pavilion on the Boulevard Square acts display the latest projects and innovations generated here, in Skavsta Business Park.



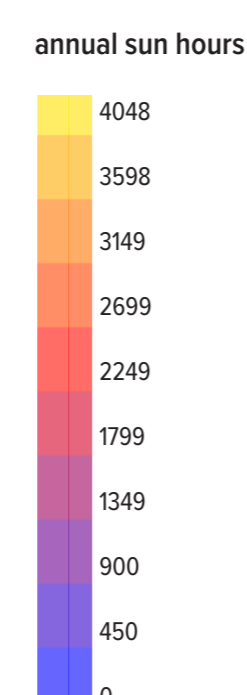
**Sustainable Food Production**  
Skavsta Park Master Plan proposes the grouping of businesses and industries relevant to Food Biotechnology, Hydroponic farming and other eco-farming research and production companies, Sustainable Organic Food companies etc. that would benefit from the synergies and collaborations with each other and with nearby existing agricultural practices.



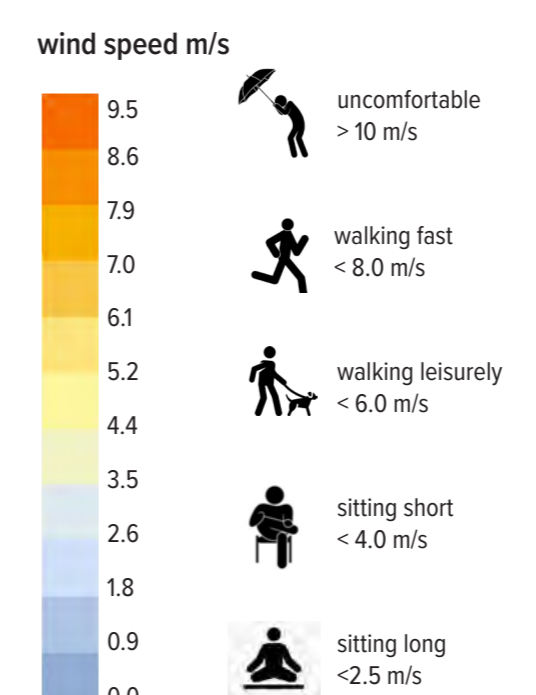
**Think Wood!**  
The Think Wood! Centre includes a Timber Manufacturing facility which harvests and uses the industrial forestry of the area. New Buildings on Site will benefit from zero kilometres materials for their construction. A Timber Design Innovation Center will be a gathering place for researchers, academics, and design professionals generating ideas for innovative uses of wood.



**Daylight Studies**  
Testing the annual sun hours to better define distances between buildings and allocate uses according to their needs in solar exposure.



**Wind Study analysis**  
Testing the wind velocity and direction during high velocity winds to assess the outdoor pedestrian comfort.



## SUN

A climatic site analysis was conducted to understand the climate conditions of the site, design responsive buildings to these conditions, examine the potential impact of the design on the environment and generate environmental strategies for the development. A sunlight analysis has been undertaken using simulation tools, illustrating the predicted annual hours of sunlight. Thus the proposed design will be able to maximise the solar exposure of outdoor spaces and minimise the overshadowing effect among buildings. Furthermore, the analysis can be used to identify potential installation of photovoltaic panels on the roofs of the proposed buildings as a strategy to both minimise dependency on the grid.

## WATER

The proposal includes rainwater gardens, rainwater harvesting, green roofs and sustainable drainage systems (SuDs) that manage and conserve local water resources, mitigate the risk of flooding and reduce the required network of sewers and drains. These water management tools contribute positively towards biodiversity, water quality improvement and urban heat island effect minimization. Rainwater is considered here a resource rather than a liability. For example, green roof rainwater will provide an alternative source of water for the proposed food production happening on buildings' terraces and roofs, decreasing the risk of water scarcity. Further studies will define the optimal use of the above tools allowing for adaptability to future changes in precipitation patterns and weather conditions.

## AIR / WIND

The proposal incorporates buildings with different heights, forms and densities that influence wind speed, wind direction, and radiation heat transfer. An initial location-specific wind study for the proposed masses was undertaken. This allowed to identify the impact of the prevailing SouthWest wind and the potential areas of concern. The studies informed the shape of the proposed buildings and partially the landscape design (tree location) to ensure pedestrian comfort in the urban areas by creating sheltered environments. The development targets to tackle air pollution by promoting public transportation, cycling, and providing overall a pedestrian and cyclist friendly environment.

## SOCIAL SUSTAINABILITY

The social dimension of sustainability is an important aspect on the agenda of Skavsta Business Park. Skavsta's structure will provide the visitors with necessary information and motivation towards a more sustainable user behaviour. Environmental friendly mobility solutions such as charging stations, well functioning public transportation and pools for bikes, cars and scooters aims to reduce not only the car usage, but even the car individual ownership. Inclusive and accessible design of the public spaces and buildings makes the area a desirable point of interest for any kind of individual. Furthermore the co-operative business model creates engaged users, community feeling and adaptability following the trend of future needs.