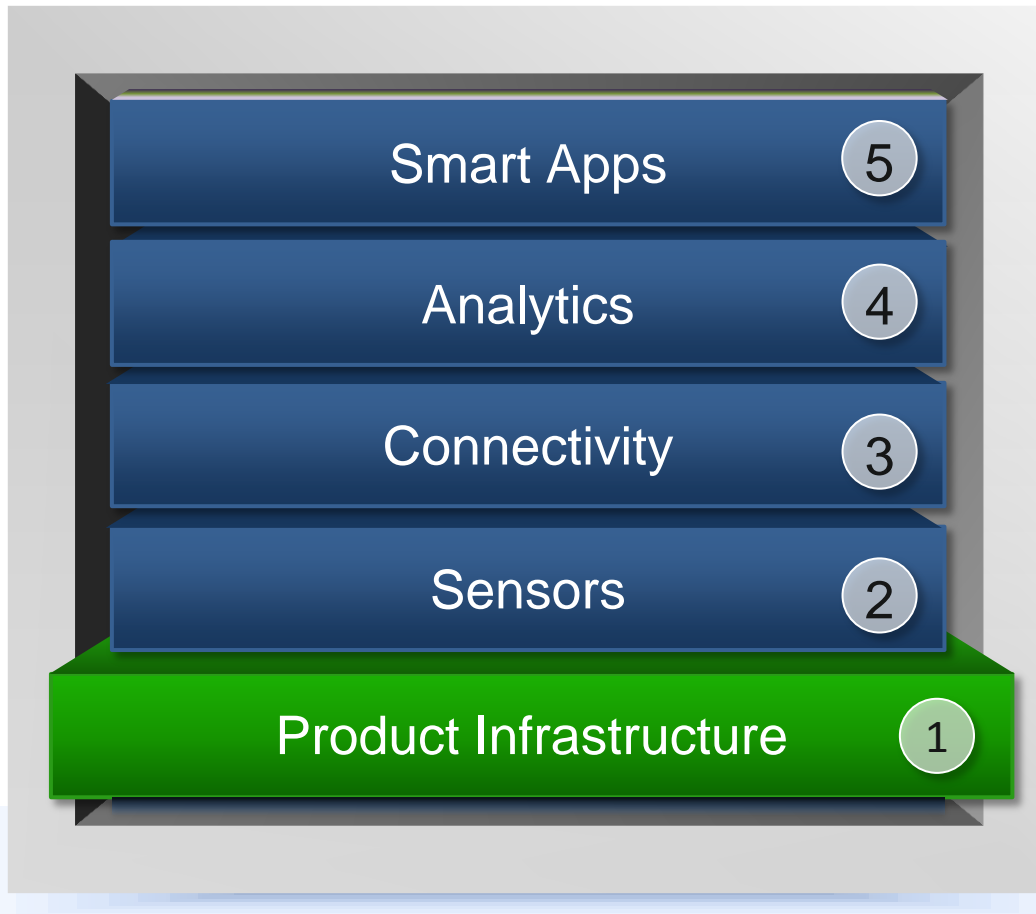# Senior Health Monitoring & Caring

- Health monitoring wearables can be used to track medical condition, record data, and provides trends
- An emergency condition may occur without the senior realising it (e.g. when in sleep)
- Senior citizens living alone particularly need more timely access to medical attention
- Medical doctors can be informed about emergency conditions
- Consensus can then be obtained from relative to allow a home visit by the medical personnel
- Cost effective solution without the need to set-up monitoring centre with agents to take/make calls
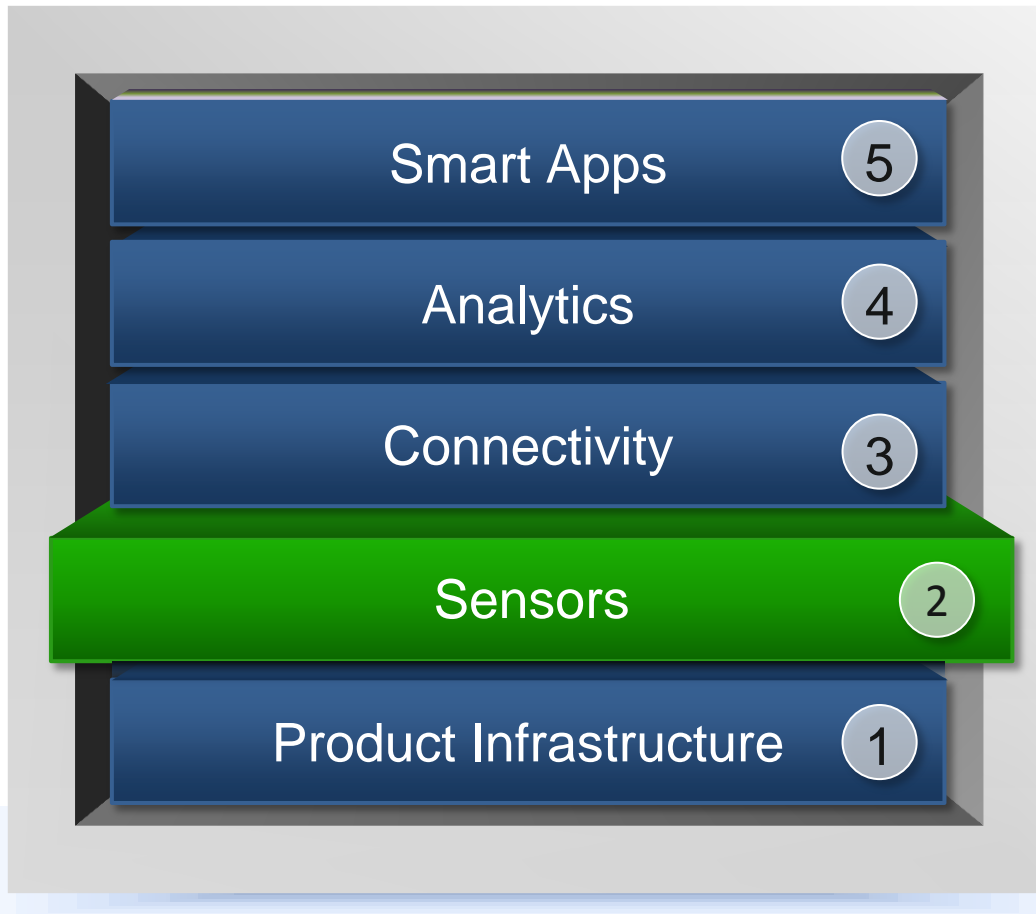
Layer 1 - Product Infrastructure

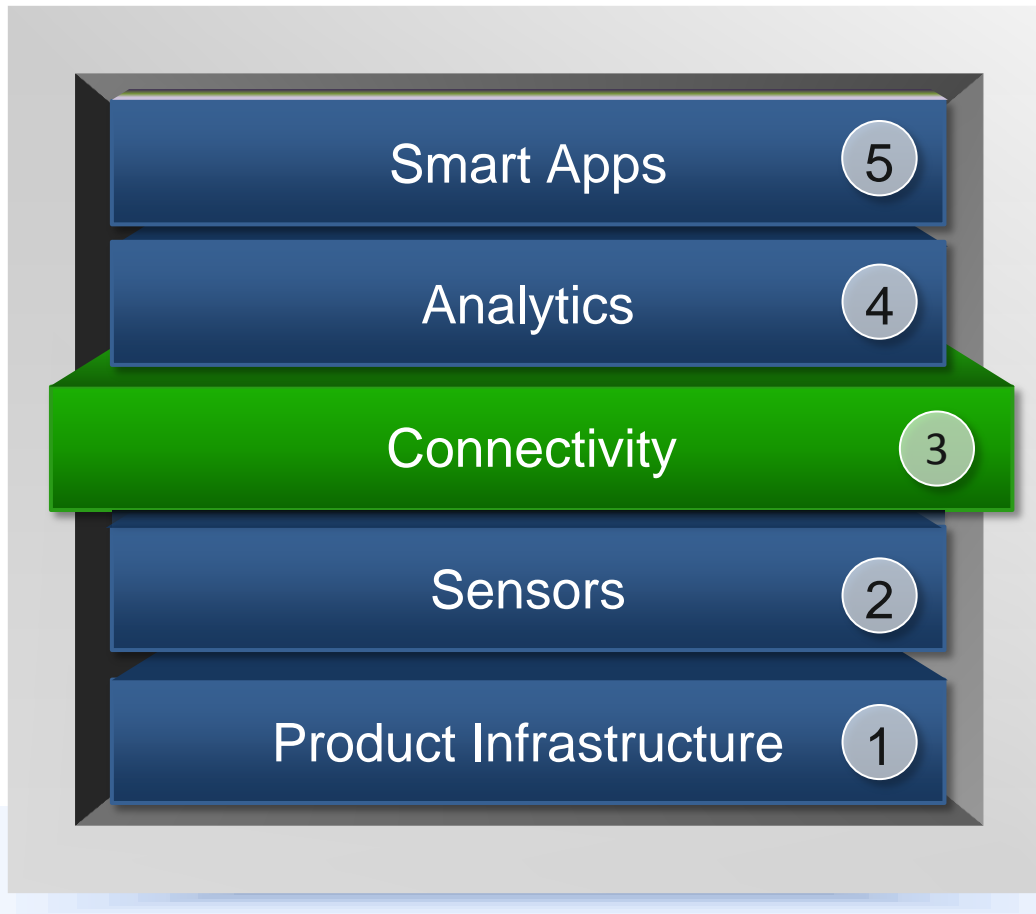| Smart Apps | 5 |
Analytics	4
Connectivity	3
Sensors	2
Product Infrastructure	1

1. Health monitoring wearable in the form of a watch or chest strap
2. Storage of health data collected from the wearable
3. Computation to generate reports and trends
4. Phone registry of medical doctors
5. Phone book of relatives

Layer 2 - Sensors

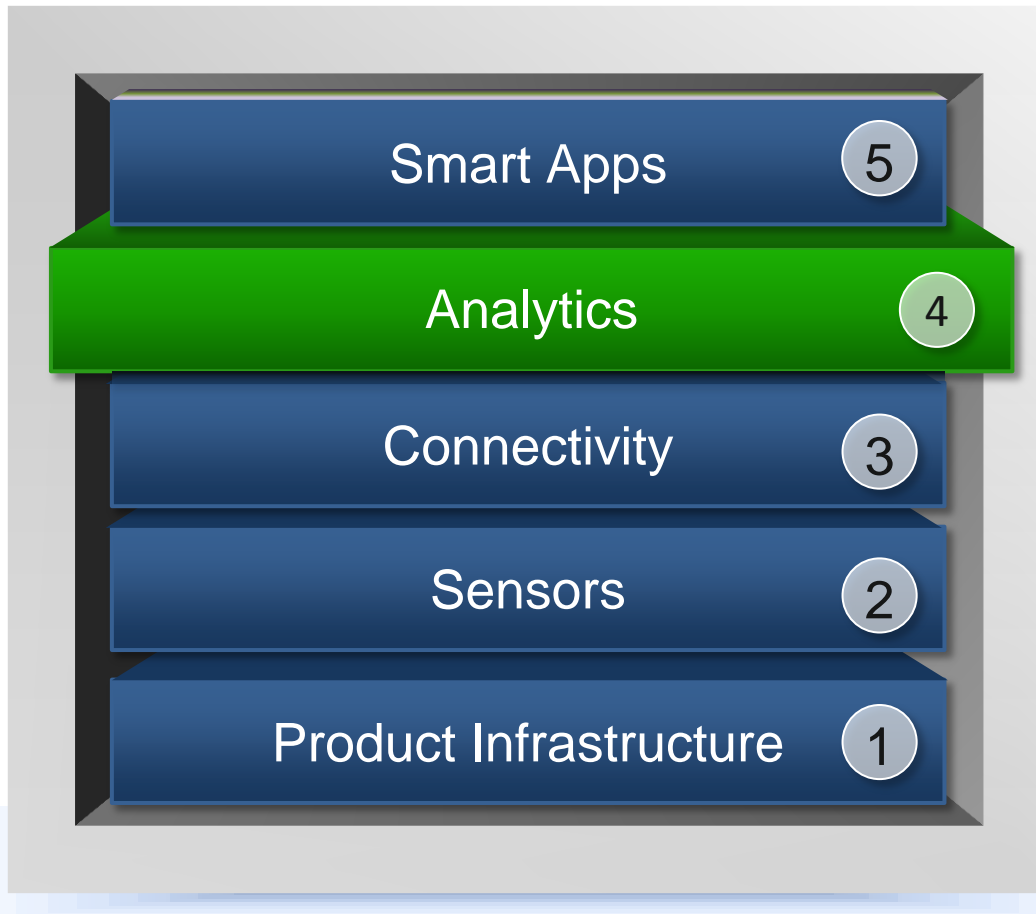| Layer	
Smart Apps	5
Analytics	4
Connectivity	3
Sensors	**2**
Product Infrastructure	1

1. GPS that provides location data in case the senior citizen is not at the registered address
2. Temperature sensor to detect body temperature
3. Heat beat sensor to detect the cardiac condition of the senior citizen
4. There could be other sensors involved that provides other health data

Layer 3 - Connectivity

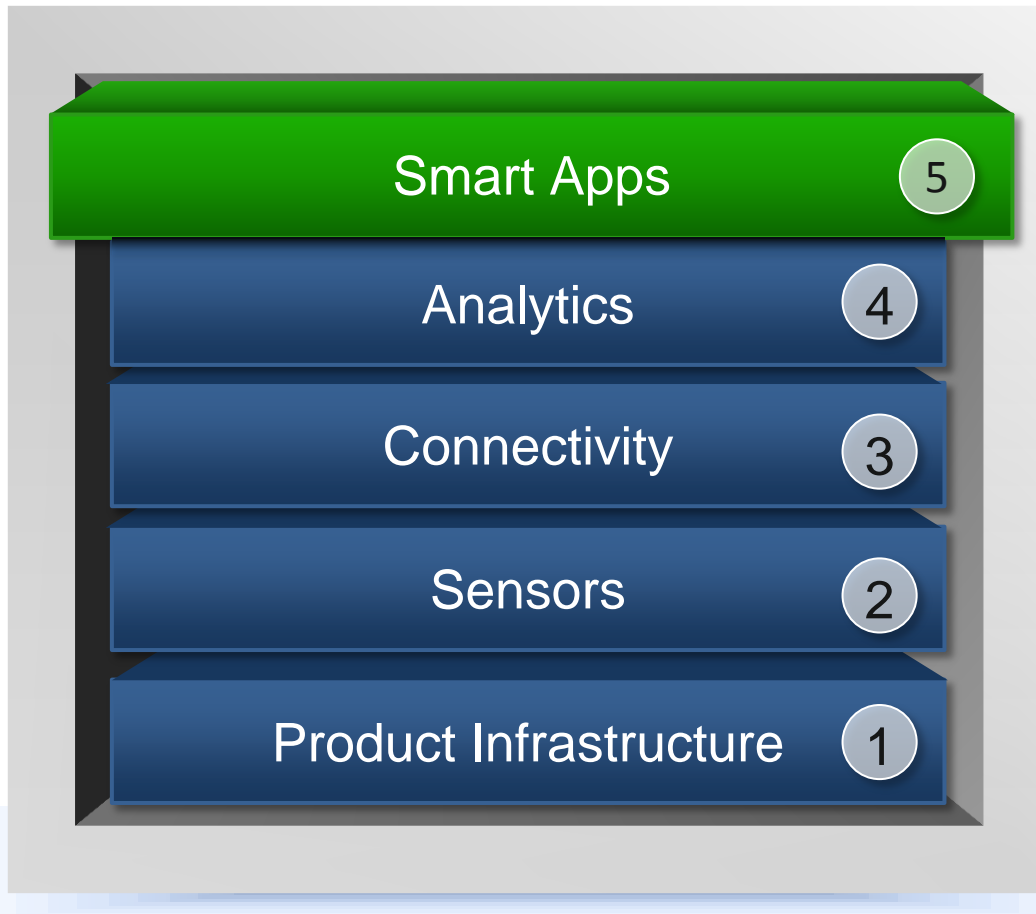|	
Smart Apps	5
Analytics	4
Connectivity	**3**
Sensors	2
Product Infrastructure	1

1. The wearable connects to the cloud using Bluetooth connection to a smart phone
2. The smart phone can then relay the data to the cloud through Wi-Fi
3. The doctor will be informed by text message through a mobile phone network
4. The relative will be informed by text message through a mobile phone network

Level 4 - Analytics

Layer	Level
Smart Apps	5
Analytics	**4**
Connectivity	3
Sensors	2
Product Infrastructure	1

1. Graphs are produced for the collected data
2. Highlights of abnormal conditions against the senior citizen's historical data and that of the community will be provided
3. Any detected trending in the health data will be highlighted

Level 5 – Smart Apps

Smart Apps	5
Analytics	4
Connectivity	3
Sensors	2
Product Infrastructure	1

1. Smart phone app to view health data records and graphs
2. Smart phone app to inform the doctor and the relatives about abnormal medical condition
3. Consensus by the relative to pay the doctor for a home visit
4. Report of home visit to be sent to relatives