Company Introduction and job reference

1. Company Introduction

A Innovative Ltd. is an integrated design firm that values design excellence, sensibility, and sustainability in the built environment. We are specializing in design and project planning of ELV system including IT system, Audiovisual system, security system, building automation, SMATV, and guest room control and acoustics design services.

Our company was built in Jan 9, 2008, and registered in Hong Kong. Now we have our offices in Shanghai, Beijing and Hong Kong. We have supporting staff in Hanoi Vietnam for Asia Projects.

We understand the need to work closely with our client. Therefore we have the following set up:

1. North China area: daily coordination by Beijing Office
2. China Shanghai area: daily coordination by Shanghai Office
3. Asia and Japan area: daily coordination by Hong Kong office

We have established cooperation relationship with high-end customers, including Four Season, IHG, Mandarin Oriental, Hyatt, Marriott, Shangri-La, and Hilton international management group.

2. Person in Charge

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3. HOTEL DESIGN

ELV and Intelligent Design for hotel
(AUDIOVISUAL + ACOUSTIC + IT + SECURITY SERVICES + GRMS + BA Design)

We are great to be worked with great numbers of high end hotels.
We have been entered into the hotel recommended professional consultant list for over 10 years.
We are great to list out some of them for your reference:

Four Seasons Hotels and Resorts
The Ritz-Carlton
Park Hyatt
hotel INDIGO
JW Marriott Hotels & Resorts
Sheraton
Grand Hyatt
IHG InterContinental Hotels Group
Marriott
Le Meridien
Andaz
Mandarin Oriental The Hotel Group
Courtyard Marriott
Westin Hotels & Resorts
Hyatt Regency
InterContinental Hotels & Resorts
Waldorf Astoria Hotels & Resorts
Fairmont Hotels & Resorts
Hyatt Place
Crowne Plaza
Hilton
Holiday Inn Express
Hyatt Hotels & Resorts
Marriott

Some of our design services are listed below:

- Audiovisual Design
- Acoustic Design
- IT Design
- Guest Room Control Design (GRMS)
- Security Design
- ELV system design

4. HOTEL DESIGN – GRMS

GUEST ROOM CONTROL SYSTEM

The GRMS system shall be well designed based on the operational need of the hotel and the innovative technology nowadays. The following factors will be taken into considerations:

1. Lighting design: Lighting design will be done by professional lighting designer. Based on the lighting design including but not limited to lux level, colour temperature, light fitting selection and lighting logic, we shall set up our GRMS to control the whole lighting system based on their sense settings and control logic requirements. Welcome mode, day mode and night mode shall be set up and presented during prototype room / Mock Up Room checking.
   Note: blue light certificate to ensure there is no blue light in the room.
   Especially for the reading light and the table lamp inside the guest room.

2. Door access control: Hotel guest room door lock system must be fully integrated with hotel PMS system so that every guest room card can only open the assigned guest room. If the door lock system is on line type, our GRMS system shall interface with the guest room door lock system at server connection level so that welcome mode can be triggered when guest open the guest room. (Welcome mode means: when the guest first time open the guest room door, guest room will be automatically lit up and the curtain will be open and TV will be turned on).

3. MEP system:
   a) Temperature of the room:
      i. When the guest check in the reception, GRMS will receive the check in signal from hotel PMS and GRMS will start to cool down the temperature of the guest room so that when guest open the door, temperature has been cool down.
      ii. When guest inside the room, our motion sensors in ceiling and in thermostatic control panel will sense there is activities inside the room and will keep the temperature as per the pre-set temperature with guest.

GUEST ROOM CONTROL SYSTEM

i. When guest sleep, the activities sensor will sense there is no motion inside the room and will turn down the temperature to save energy step by step. Under this sleep mode, the LED lamp in the control panel will be dimmed down automatically.

b) Humidity of the room:

i. The thermostatic shall have humidity sensors. When the humidity is high, we shall turn on the humidifier(heater) in the FCU to control the humidity. It is useful when the room is under non occupied.

c) Fan Coil Unit:

i. To control the Fan speed, we shall control their Fan speed by dry contact directly from the GRMS control panel.

ii. To control the room temperature, we shall control the control valves of the Fan Coil Unit based on 0-10V interface.

d) Condensing water under the Fan Coil Unit:

i. When the Fan Coil Unit get condensing water, ceiling will be damaged. We can ask MEP to install water dripping panel under the fan coil unit and we can add water leakage sensor to alert the engineering team when there is condensing water situation.

e) Air quality monitoring"

i. We shall design CO2, PM2.5 and PM10 sensors in the return air void to sense the air quality of the guest room.

ii. We shall report the air quality to the BMS system by BANET so that BMS can send me clear air to the corridor.

iii. Unless MEP system comes with HEPA filers, we shall check the pressure difference between the HEPA filter to ensure they are working properly.

f) Voice control:

i. When room check in, PMS will send language profile to the GRMS system and then the system will have voice interface at the bedside counter. The voice control shall not be complicated and we suggest to have "Master one", "Master off", "Turn on TV" only.

4. Door ajar:

When the guest room main door is not closed well, door ajar shall alert to the system so that hotel staff can come to ensure the room's safety. If the hotel guest room lock is on-line type, the system will go through the door lock system. If not, it can go through GRMS system and send email to the security staff or house keeping staff to check for room safety.

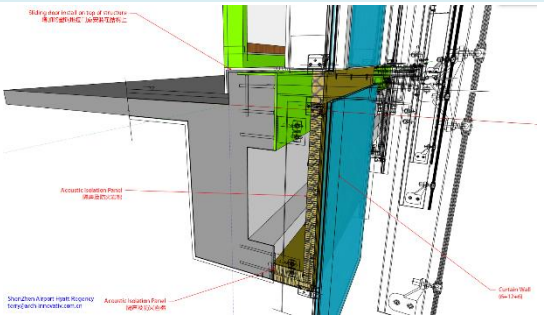
5. ACOUSTIC DESIGN

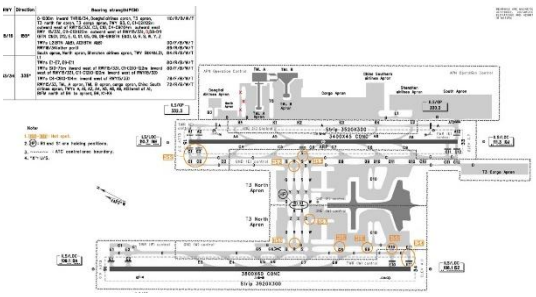
NOISE ISOLATION / AVOID NOISE GENERATION

To meet with the professional requirement of how silent the environment shall be, we shall work with architecture / interior design and the M&E design to specification each specific acoustic in each area in terms of RT60, NC rating and STC rating. Then, we shall check all M&E design, curtain wall detail, slab construction and wall details to ensure the design figure can be work properly.
Our projects include but not limited to TV station, TV studio, theaters, music hall, theme park, airport, bank office, hotel guest rooms, hotel functional area and office buildings.

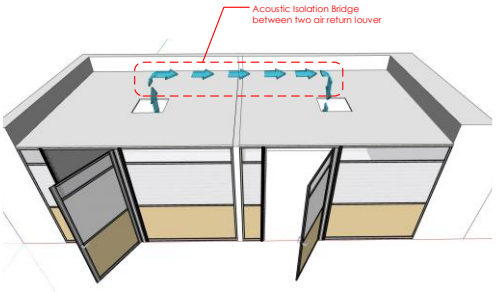
Our consulting services consider:

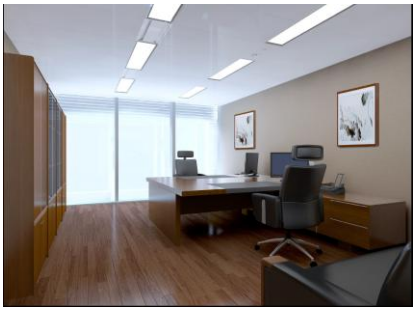
- Environmental Noise from the highway, railway or from airport shall be checked to ensure the design parameter between the outdoor and indoor can be set up. It will affect the curtain wall, window structure and the wall thickness. For TV station and TV recording studio, that must be taken into serious consideration since the NC rate is recording studio is so critical.





- For airport noise isolation, we have to check the landing path and take off path since the noise figure is not the same.
- For guest room and office, we have to ensure the NC rate of the room (how silent is shall be). We shall check all kinds of noise generated equipment and the potential noise lead into the room.
- For CEO or VIP rooms, we have to ensure the privacy of the room and ensure there is no sound to be leaded out or noise coming from the air duct. It shall be done for head office of bank, CEO and CFO office, Government head offices.





6. ACOUSTIC PROFESSIONAL TESTING (THIRD PARTY TESTING)

PROFESSIONAL ACOUSTIC TEST

To ensure there is no noise lead into the building nor our electrical and mechanical system won't affect others, we carry out professional test for our clients including airport, theater park, office buildings, CEO and CFO rooms, theater, music hall, TV station and TV recording studio.
We office three kinds of testing;

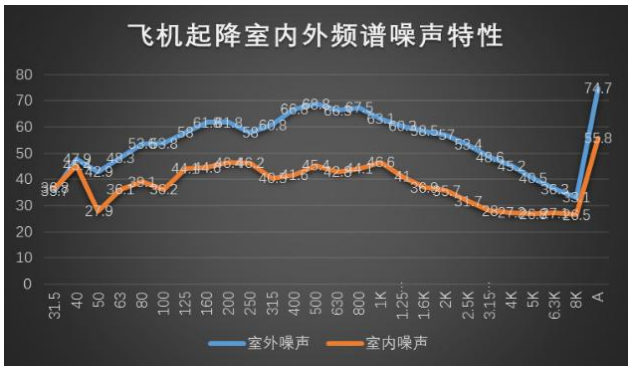
1. Outdoor testing,
2. Indoor testing and
3. CEO/CFO office privacy testing

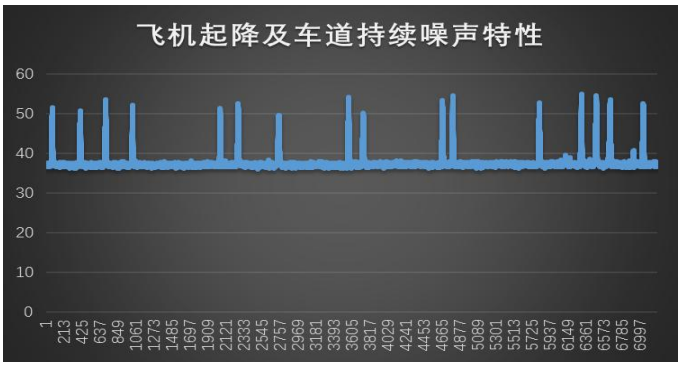
Our consulting services consider:

- Outdoor testing:
  Air Port Noise test to ensure there is no noise coming into the building and guest rooms. There is curtain wall and window construction shall be checked again noise.
  Test to ensure cooling tower won't have noise problem to others and it complies with the local environment standard.

- Building internal acoustic test
  This is to ensure the office and the end user of the end user won't be affected by kitchen, AHU rooms, lift car and other vibration into the building.

- VIP / CEO privacy test
  This is to ensure the privacy of the important rooms like CEO office, CFO office. For example, we do the design for the head office of bank.





7. HOTEL DESIGN SAMPLE – AV SYSTEM

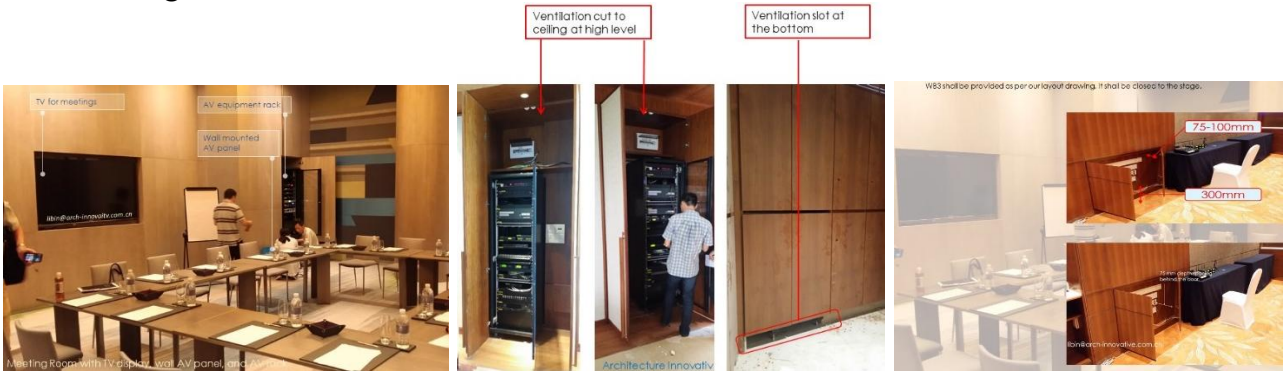
AUDIOVISUAL DSEIGN EXAMPLE

Ballroom LED screen design:
For ballroom and meeting rooms, we design high end LED screen for meetings and conference. They must be front access to save our valuable space in the ballroom.

Webcasting and network meeting must be supported well:

- Projection screen and projector shall be designed in detail to avoid clashing with the chandelier. We use 3D model and our BIM system to help the designer to design the spacing and select the right model for projection.

- Wall panels / floor panels shall be designed based on the requirement of the project and the goal is to recess those socket out and keep the aesthetic of the overall design.

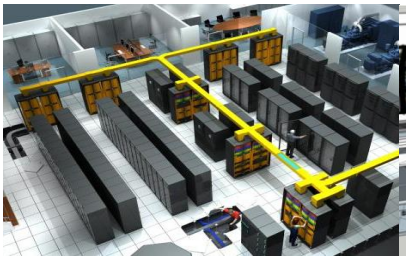


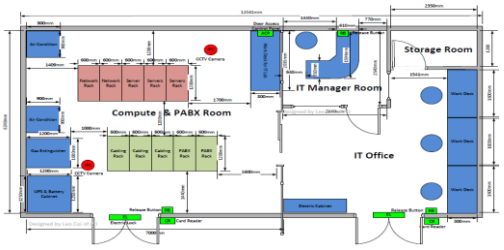
8. AI-TECHNOLOGY

INTELLIGENT BUILINGS AND INTELLIGENT DESIGN

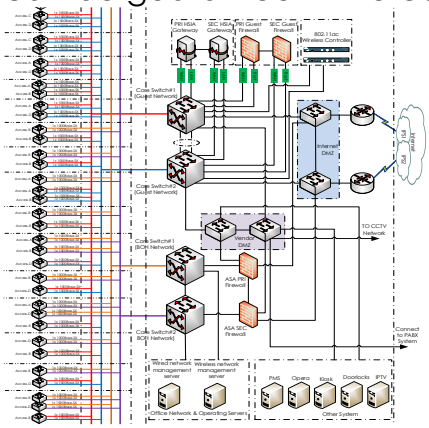
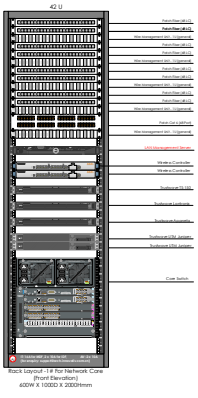
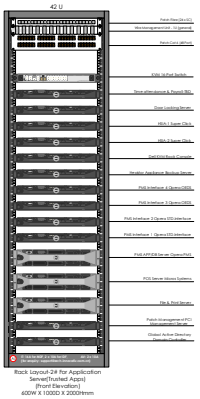
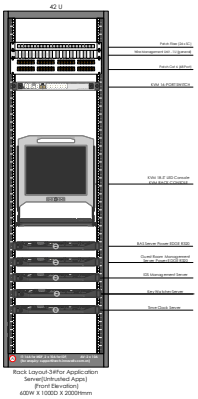
We select and combine different intelligent systems including software and hardware to building up intelligent systems, intelligent buildings and smart cities.
Our consulting services consider:

- Intelligent buildings are a topic which needs to be revised based on the new technology. There are three phases of work to design an intelligent building:
- Infra-structure:
  - For hardware infra-structure, we are talking about riser, cable pathway and please refer to our introduction in (BUILDING INFRASTRCUTRE)



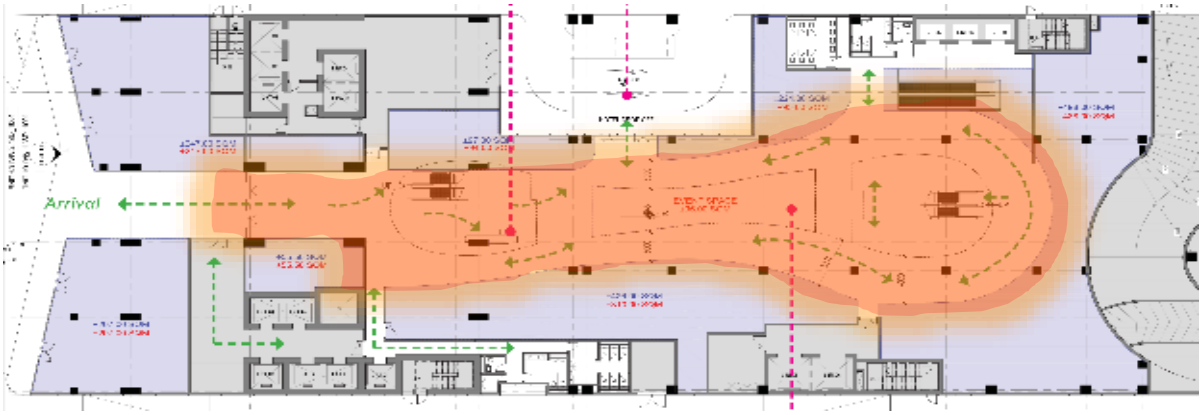



  - For software infra-structure, we need to design the electronic map for indoor and connect the building from indoor map to the outdoor map in google map, apple map and Baidu map so that our software can related to all three international electronic map.
- Hardware implementation:
  - For intelligent hardware implementation, we must ensure the connection between devices, or between property devices to our clients. In terms of hardware, they are wired connection and wireless connection.
  - It seems not easy but our experience in the industry can help our clients to ensure wired connection is sufficient for the coming 10 years. We are doing this kind of future provision since we set up our company 10 years before.
  - For wired connection, we apply EIA/TIA and ISO11801 systems to ensure our work can be guarantee in the coming 10 to 20 year as per internal potocol.

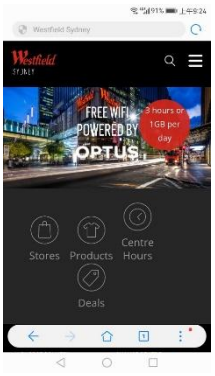





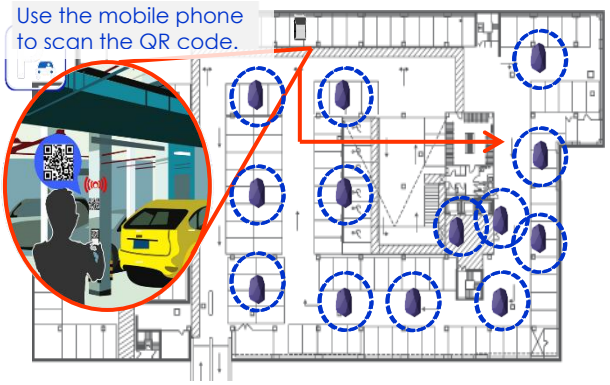
  - For wireless connection, we apply the most up to date international wireless connection method in 5G and WiFi so that all our devices in the coming years can be connected.

- When there is wireless connection not support, we can extend our wireless connection cover based on our EIA/TIA cable infrastructure.

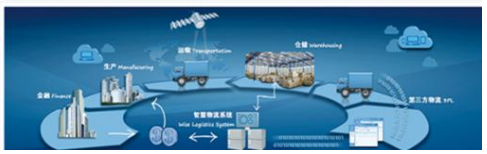


- The software application is important but it can only be built at the last year based on our hardware infra-structure and software electronic map. Some of the example are listed below:
- Intelligent APP in a Mall: link with our own electronic map:





- Face recognition with turnstile and security camera:



- Security camera for beach and delivery services:

- Retail + Web Studio

- Non-human retail

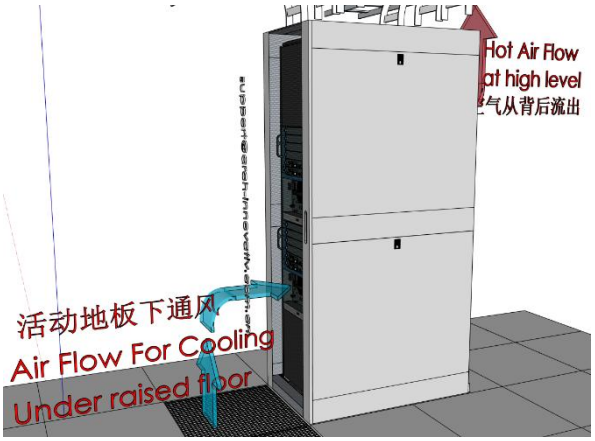
- Mouse recognition

9. AI-TECHNOLOGY

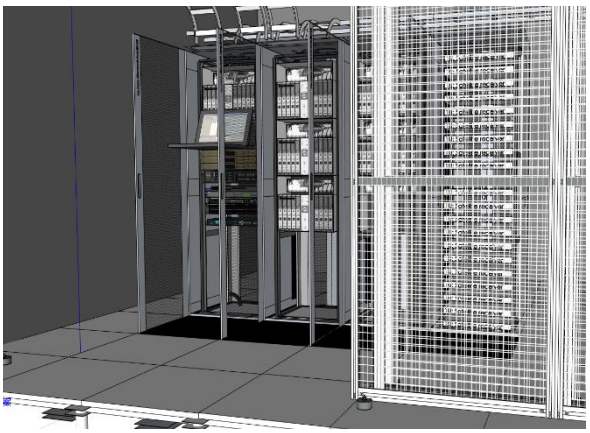
BUILDING INFRASTRUCTURE DESIGN

We design the infrastructure system for IT network, audiovisual systems, security systems and building automation system according to the building type, operational requirements, and the trend of technology development throughout various design phases. Of course, we also consider how to incorporate 5G network and electronic data map in our projects. Our early approach always conduct interviews with end users, technology vendors, architects and designers, engineers, and telecommunication professionals to ensure our design is innovative, cutting edge, as well as practical. The work starts from concept design, schematic design, design development, tender documents, and construction administration. It is our goal to design and specify systems that would remain innovative and advanced in consideration of the typical 12-to-18 month construction period.
Our consulting services consider:

- Using of BIM software to help the project team to path their way for all infrastructure provision like slab opening, equipment room location and satellite earth station to connect satellite at equator orbit.
- Optimal room spacing for MDF, IDF, security control room and car park entrance for the building
- Locate IT/AV room in consideration of the transmission limitation of SMATV, IPTV, IT LAN network, Wifi coverage, and analogue video signals



- Wifi infrastructure design to achieve 802.11 or 5G and coverage of Wifi voice between different network segments
- We work with subcontractor's provided network to set up proper network security setting in routers and switchers to achieve safety requirements and effective use of network
- Our tools and methods:
- We use 3-dimentional studies to understand and implement proper spacing allocation and equipment location, e.g. for all MDF Rooms, IDF/Risers, or Satellite Dish Antenna location to maximize exposure to signal and minimize visibility

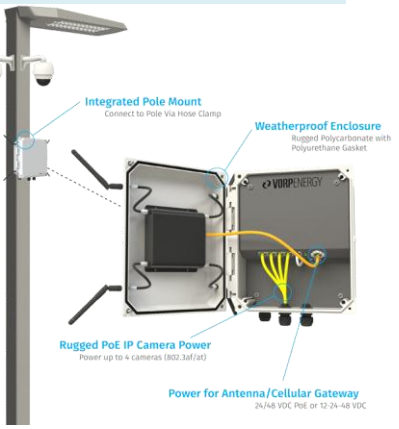


10.IT – INFORMATION TECHNOLGY DESIGN

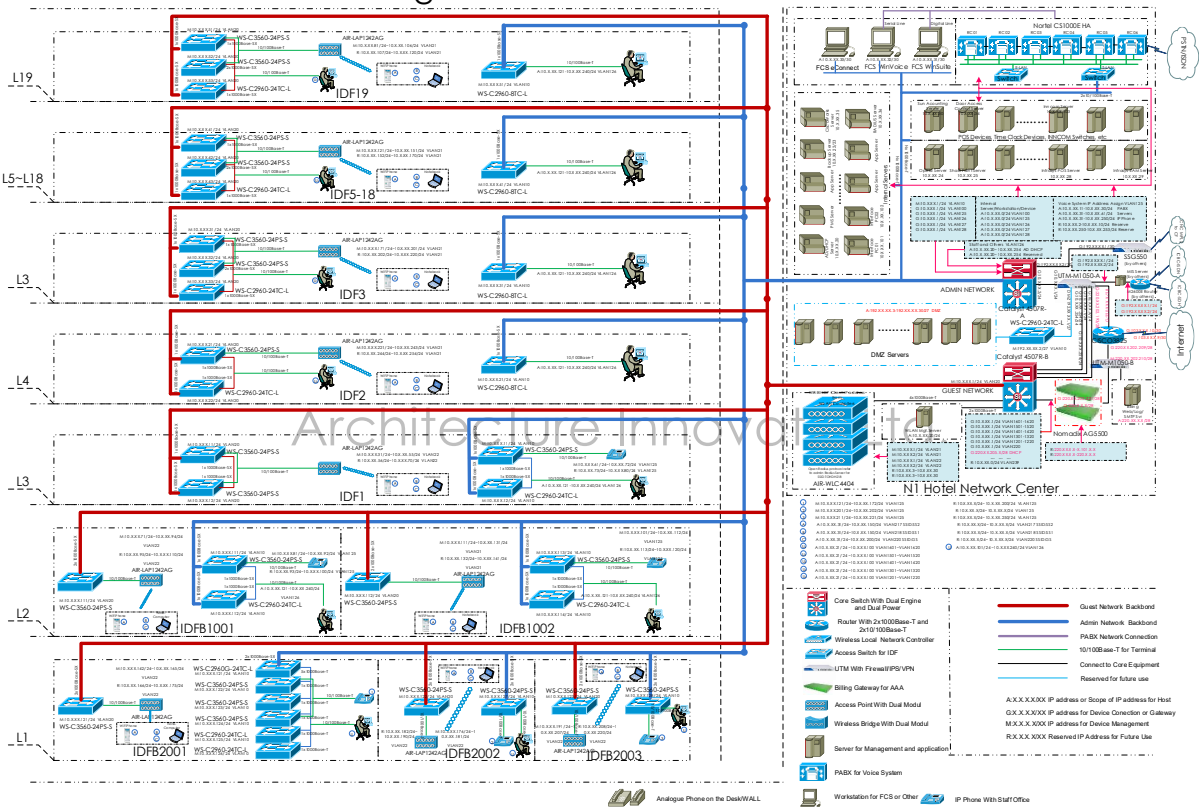
WIFI, LAN NETWORK AND VLAN ARRANGEMENT

For computer network design, we design and assist our client to set up network switchers and servers according to the need of network efficiency and safety determined by the client. In general, Administrative Net will be set up for operational staffs while Guest Net will be set up for guests.
Our LAN design takes computer network security and user-friendly requirements into consideration. We generally split the network into multiple VLAN segments for different users. However, for some application that needs central authorization and monitoring, we would allow specific connections between certain required segments. To ensure we bridge these connections seamlessly, we always interview user groups and make suggestions on VLAN set up, IP address, and firewall settings for the network.
Our consulting services consider:

- WiFi design: we carry out the design starting from the theory of WiFi coverage at different range of WiFi channel and then consider the overall signal and throughput per mobile users. Then, we consider how to cover WiFi signal based on the site condition.
- Our tools and methods:
  - 3D-BIM model
  - WiFi Fluke AirMagnet Survey



- For the network design, we are putting special care about how the network protocol is built. The following schematic show how detail of our work standard:



11. PROFEFSSIONAL DESIGN

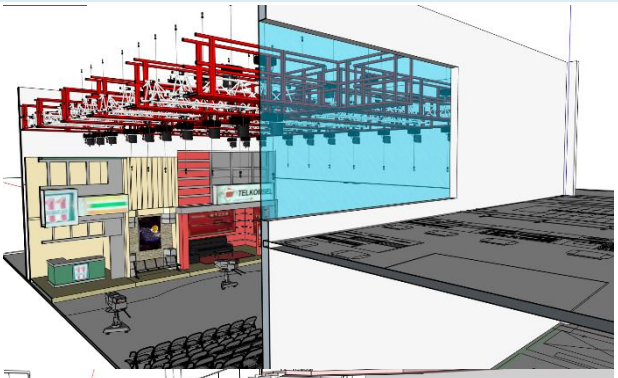
THEATER, TV STATAION & MUSIC HALL DESIGN

The music hall, theater and TV station/studio design are professional design which need specialists from lighting, acoustic, IT network, display, satellite, CATV and video + audio recording and production.

For theater, speakers, stage rigging, stage lighting and acoustic design are all critical to the operation of a theater. While TV studio shall design from the infrastructure and the operation flow of the TV production and broadcasting method. Whether it shall be HD-SDI or IP network, we are in position to work with the design team from infrastructure (building height, building load, electrical load & room location and spacing) to the professional facility location (rigging and lighting fitting design, cabling system design, network switch and WiFi design, intercom design, TALLY control design and satellite and CATV system connection).

Our consulting services consider:

- Space infra-structure design, we consider the spacing of each room and all related room spacing connection and flow.
- For music hall design, we have to take care about acoustic requirement in terms of spacing requirement and wall material to ensure sufficient Rt^{60} is provided.
- For theater hall, we also provide seat arrange so that the architect can work out a better arrangement to match with their design.
- For green screen system, we specify the spacing, screen, lighting fittings, wall finishing, door lock, connection between the studio to CCC or PCN.



12. HIGH-TECHNOLOGY FUNCTION DESIGN

BALLROOM, MEETING ROOM, HOME AUTOMATION

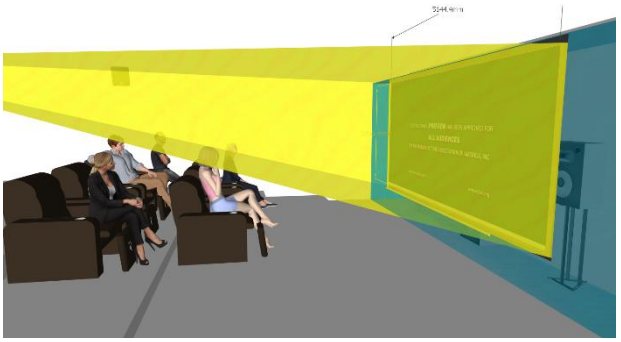
BALLROOM DESIGN

We design and integrate HD / 4K / 8K systems for all ballrooms and meeting rooms with wireless connection and 5G provision to support operational needs for meetings in consideration of the interior design aesthetics.

3D projection, THX compliance design and interaction systems are elements for highly automated system.

Our consulting services consider:

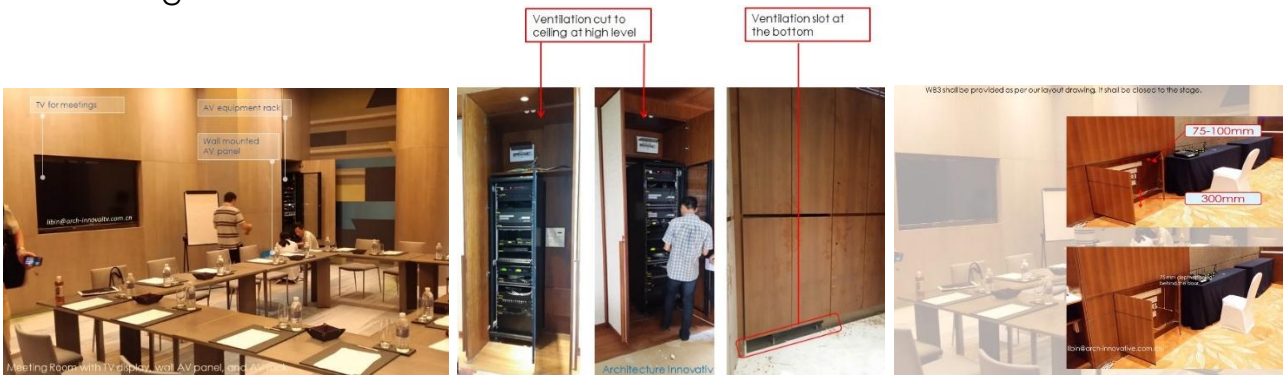
- THX design for theater sound, spacing and projection. Speakers shall be recessed behind the sound transparent projection screen which won't degrade the sound quality. We shall locate the subwoofer offset a bite to minimize the low frequency resonance.



- Projection screen and projector shall be designed in detail to avoid clashing with the chandelier. We use 3D model and our BIM system to help the designer to design the spacing and select the right model for projection.

- Meeting room where is smaller in space but shall have the similar function of a ballroom. More HD / 4K / 8K connection is available since it is easier for connecting 4K and 8K system in a meeting room.

- Wall panels / floor panels shall be designed based on the requirement of the project and the goal is to recess those socket out and keep the aesthetic of the overall design.



13. Job Reference

Please kindly find our project reference in the following: