TOWARD INTEGRATION: Collaborative Architecture and Design Methods

Thesis presentation for a
Thesis proposal for a
Fargo International Market & Food Co-op

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Problem Statement

What are the implications of architecture delivery models on the access to and propagation of quality architecture?

Claim Under Investigation

The current model for architectural delivery falls short of providing high quality buildings which are financially accessible to clients as well as being a profitable venture for architects.

Supporting Premises

The current models for architectural delivery are flawed and outdated.

Providing quality architecture requires effective processes of design and implementation.

Architects are struggling to sustain a viable practice while creating quality architecture.

Economically accessible architecture is needed for many clients.
Current architectural delivery models lack in communication, sharing, and accountability. (such as design/bid/build)

Integrating Project Delivery as a formal collaborative process is successful by:
- Involving key participants early
- Intensified Planning and goal definition
- Collaborative and Open communication

Technology and Building Information Modeling (BIM) enable further collaboration of key participants, by allowing participants to develop one model, virtually merging the building's parts to create a cohesive and resolved model.
Forming Conclusions

Integration of people and process produces further developed and integrated architecture, and therefore higher quality results.

meaning...
- less waste
- better coordination of complex issues and details
- shared success and failure
- **collaborative innovation**

Process

- Initial Planning
  - developing program/goals
  - Initial concepts of layout/form

- Collaboration

- Development
  - Based on collaborative decisions
  - Integrating ideas/systems

  - Collaborative innovation
  - Group decision making
  - “Consultant” issues/input
Typology

Food Co-op

Grocery
Deli
Education

International Market

Retail shops
International foods vendors

An integration of processes, people, and experiences

Whole Foods Co-op
Duluth, MN

Midtown Global Market
Minneapolis, MN
Site/Context (Fargo, ND)
Site/Context (Fargo Laundry Building)

Constructed in 1923

Masonry shell with interior timber frame structure

Industrial style

Flexible space

Keith & Kurke Architects and Engineers
Collaboration
Consisting of a working session with Chris Hawley of Stahl Meland Hawley Architects & Builders, chosen for a balance of architectural design, contracting, and collaborative process experience.

STRUCTURE

* ISSUES
- Columns on same pattern/line as existing
- Separation between east-west and north-south
- Different structural patterns set up the room
- Seed (concrete) vs. wood (wood)

* IDEAS
- Material
  - Majority being different than existing
  - (concrete) vs. (wood)

MECHANICAL

- HVAC to new east

SITE

* ISSUES
- Main floor 5 above grade
- Bring people up some first on site, some water

* IDEAS
- Shadows of parking (stepped)
- Voids of landscape

CIRCULATION

- Interior ramping
  - do some outside, some inside
- Incremental entry points
  - Points of interest

DESIGN + FORM + OTHER

* ISSUES
- Connection to historic building
  - Offset from existing (reveal)
- Core tower may be misleading when entrance is

* IDEAS
- Reduce size
- Canopy
- Axis
Development

Quick visualization of decisions from collaboration

Reveal/offset bridging new and existing
Material contrast and replication
Soffit/mechanical chase between new/existing

CONCEPT RENDERING
Main Level

ENTRY / RETAIL SHOPS / RAMP / CLASSROOM KITCHEN

OPEN CORRIDOR / PRODUCE
Classroom Kitchen
Provides a community gathering place to learn cooking techniques, promote products, and encourage healthy eating.

Outdoor Seating and Market Space
Canopies provide shading and color for a pleasant outdoor environment to eat and support outdoor market events.

International Foods
Guests can stop for lunch, with a choice of two international foods vendors and the co-op deli, in a bright informal cafeteria.

Structural/Mechanical/Circulation Corridor
The bridge between new and historic construction provides a chase for mechanical piping, material transition from new building to old, and natural daylighting.

Replacement Windows
New glazing can preserve the historic character of the Fargo Laundry Building facade while reducing thermal loss and allowing stimulating sunlight into the building.

Cart Escalator
People and cart escalators allow shoppers to easily access each level.

Storage
Existing and additional basement space allows for ample dry and freezer storage, while a dedicated freight elevator moves products floor to floor.
Thank you for participating.