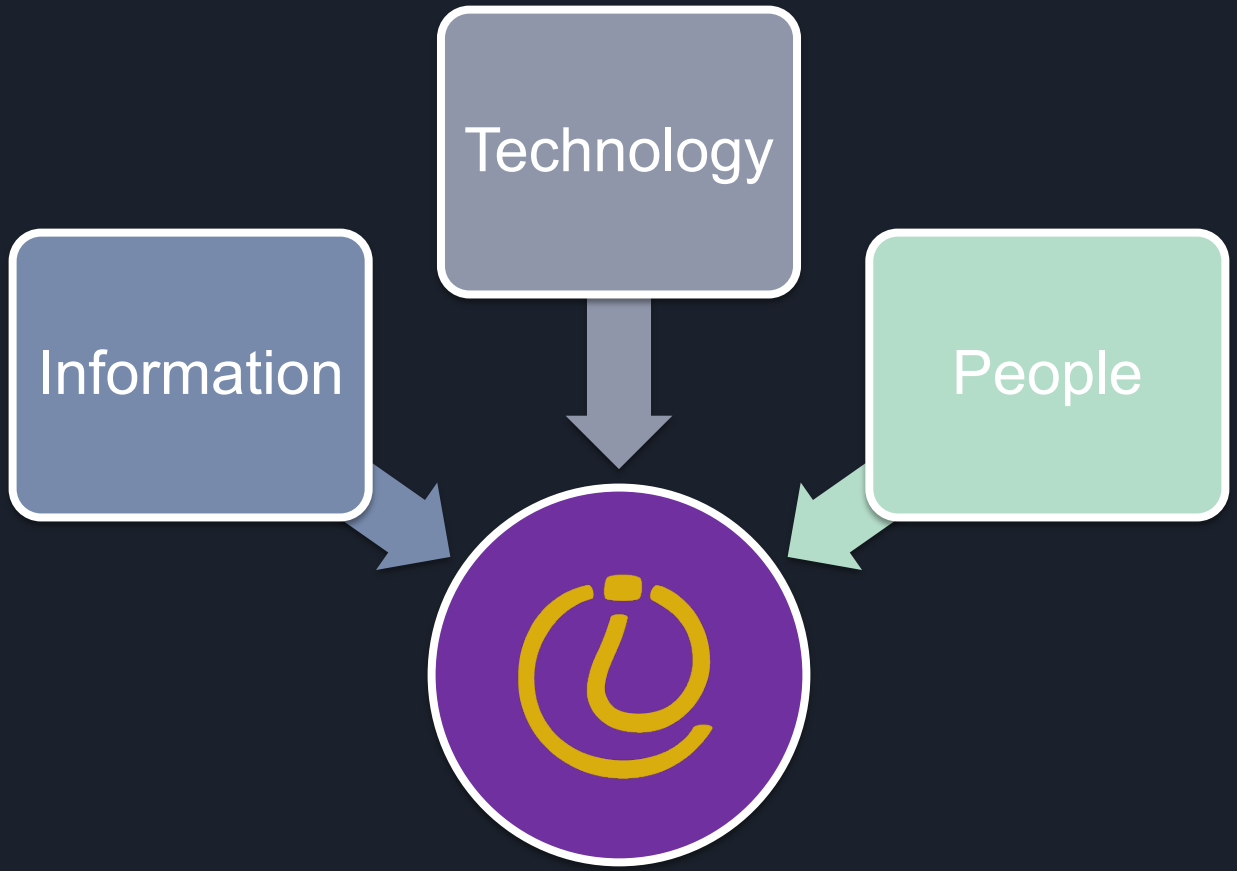
The GAMER Group

Information School
UNIVERSITY of WASHINGTON

GAMER
GAME RESEARCH GROUP

Marc Schmalz
mschmalz@uw.edu


Technology
Information
People

Game Studies at the GAMER Group

- Organization of Games and Game-Related Artifacts
- Behavior of Game Players and Developers
- Games and Learning

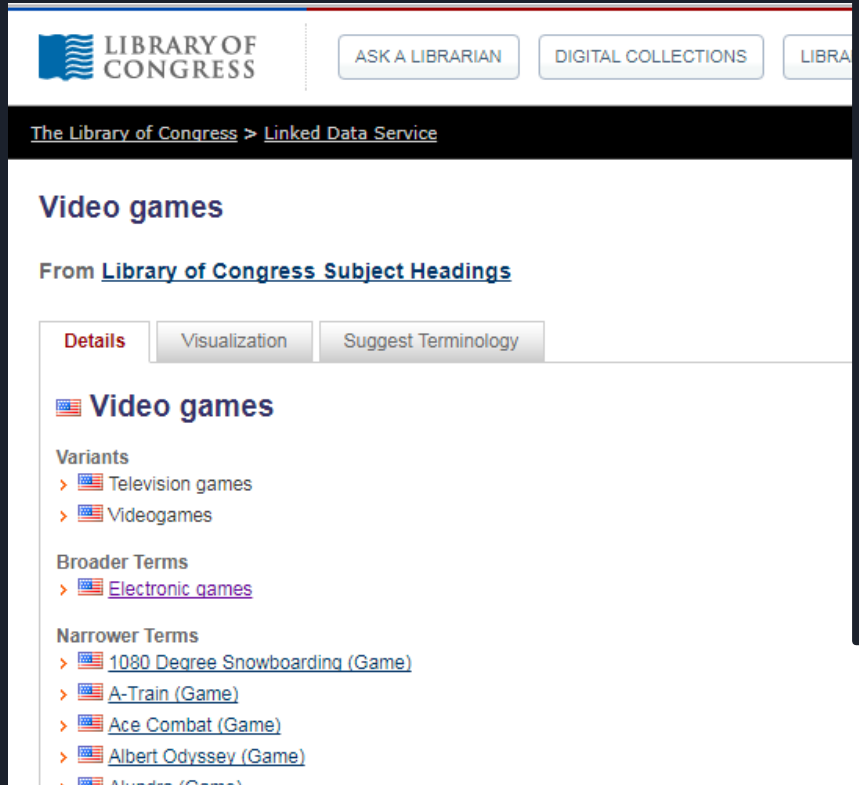
Today's Project Topics

1. Video Game Metadata Schema
2. Curating Collections of Game-Related Artifacts
3. IT Identity and Game Development

Video Game Metadata Schema

How do we organize and describe these games?

How LCSH Does It



How LCSH Does It

Internet games

From Library of Congress Subject Headings

Details | Visualization | Suggest Terminology

Internet games

URI(s)
- http://id.loc.gov/authorities/subjects/sh95000402
- info:lc/authorities/sh95000402
- http://id.loc.gov/authorities/sh95000402#concept

Instance Of
- MADS/RDF Topic
- MADS/RDF Authority
- SKOS Concept

Scheme Membership(s)
- Library of Congress Subject Headings

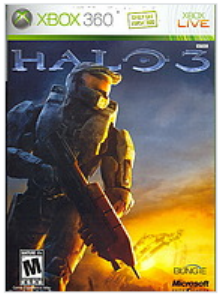
Collection Membership(s)
- LCSH Collection - Authorized Headings
- LCSH Collection - General Collection
- LCSH Collection - May Subdivide Geographically

Broader Terms
- Electronic games

Narrower Terms
- Club Penguin (Game)
- Multi-user dungeons
- Nanovor (Game)
- Yahoo! games

How WorldCat Does It

Details



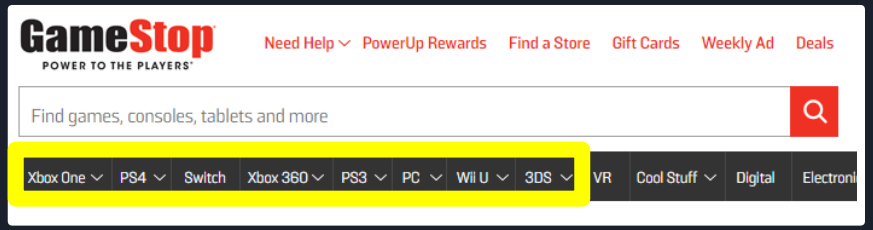
Halo 4

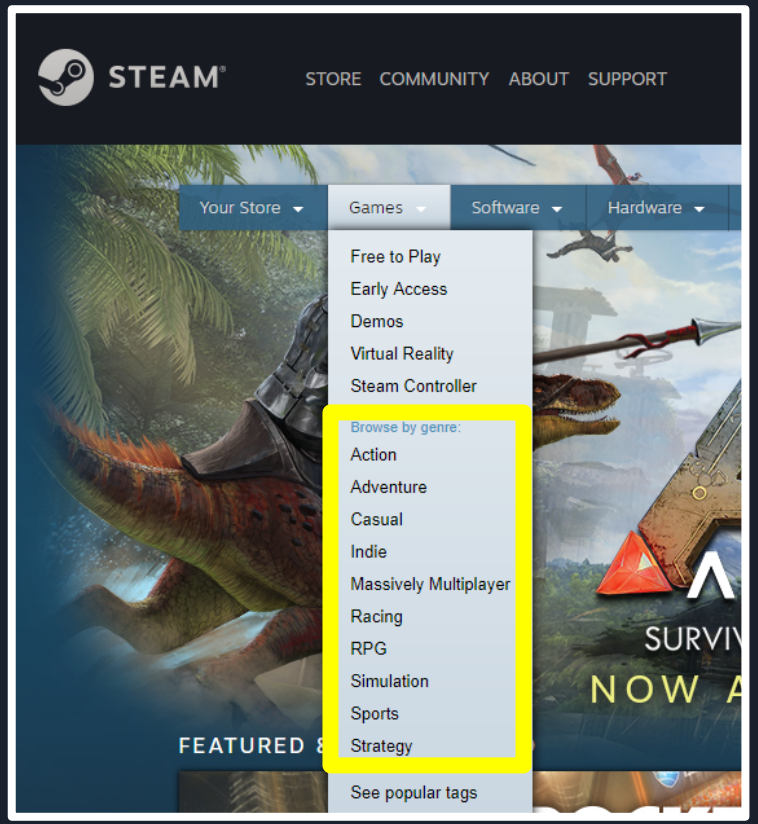
Genre/Form:	Computer war games Video games Xbox video games Computer games
Material Type:	Computer game
Document Type:	Computer File
All Authors / Contributors:	Microsoft Game Studios.; Bungie (Firm)
OCLC Number:	816142886
Notes:	Title from disc label. 1-4 players; co-op 2-4; system link 2-16 ; online multiplayer 2-16 ; 4 MB to save game; voice.
Target Audience:	ESRB rating: M, Mature 17+ (blood, violence).
Description:	2 computer optical discs : sd., col. ; 4 3/4 in.
Details:	System requirements: XBox 360 with NTSC designation; Xbox 360 requires up to 256 MB for system updates and additional storage for some game features. XBox LIVE System Requirements: In available games, paid subscription required for online multiplayer; some features and downloads require additional storage, hardware, and/or fees.
Other Titles:	Halo4 Halo four
Responsibility:	Microsoft Game Studios ; Bungie.

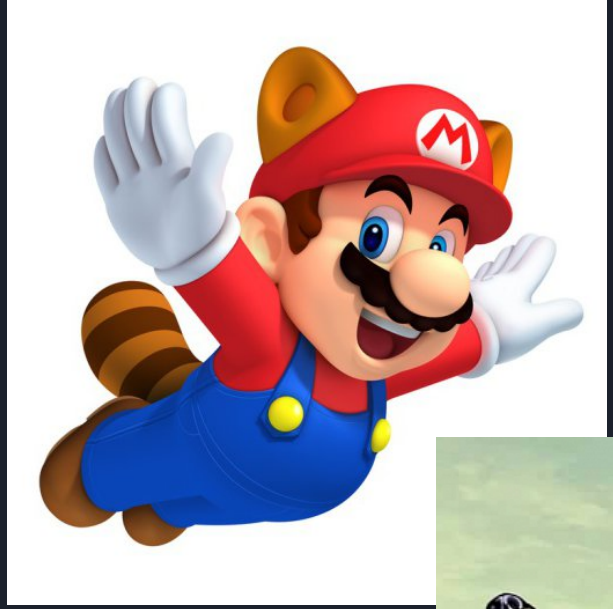
How the Web Does It

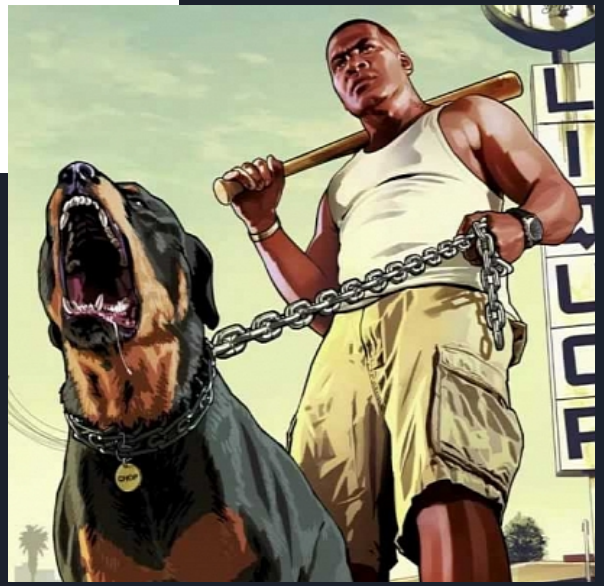
Common Browsing Options

- Platform
- Genre









What About Platform?

Platform doesn’t tell much about the games themselves

Problem

Game information on the Web is often unstructured, cumbersome to navigate, unvetted, and unverified

Traditional library standards have limited applicability

Current game information systems offer limited options for browsing and discovering games.

www.wallpaperfo.com

How can we provide more intelligent access to video games?

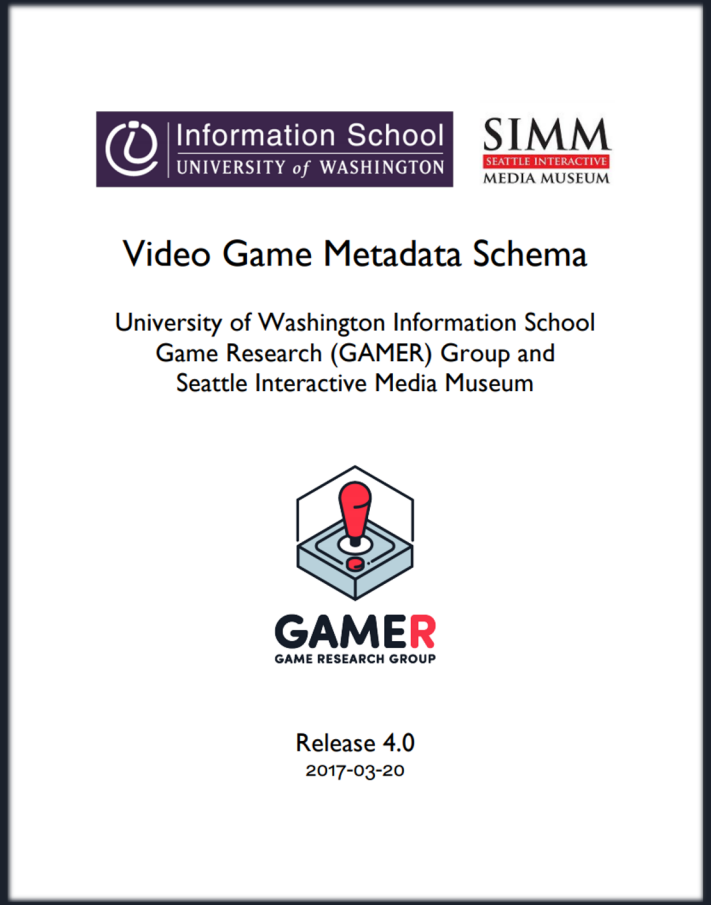
Create a metadata schema that can capture the essential information about games in a standardized way.

Our Approach

User-based Analysis: Personas and Use Scenarios, Interviews, Survey

Document-based Analysis: Review of existing resources and data structures/standards

Data Modeling: Creating a conceptual model for representing games and their relationships

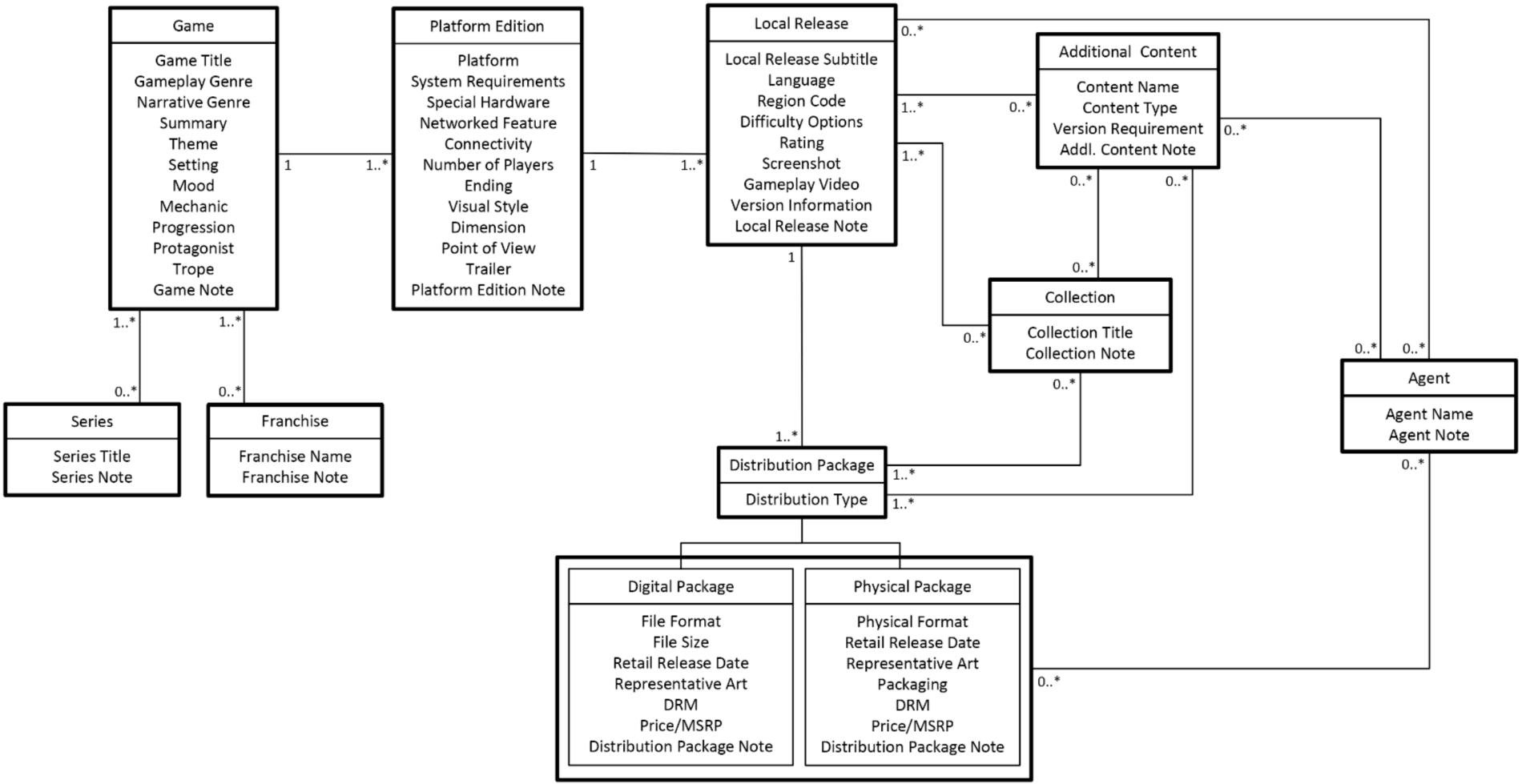


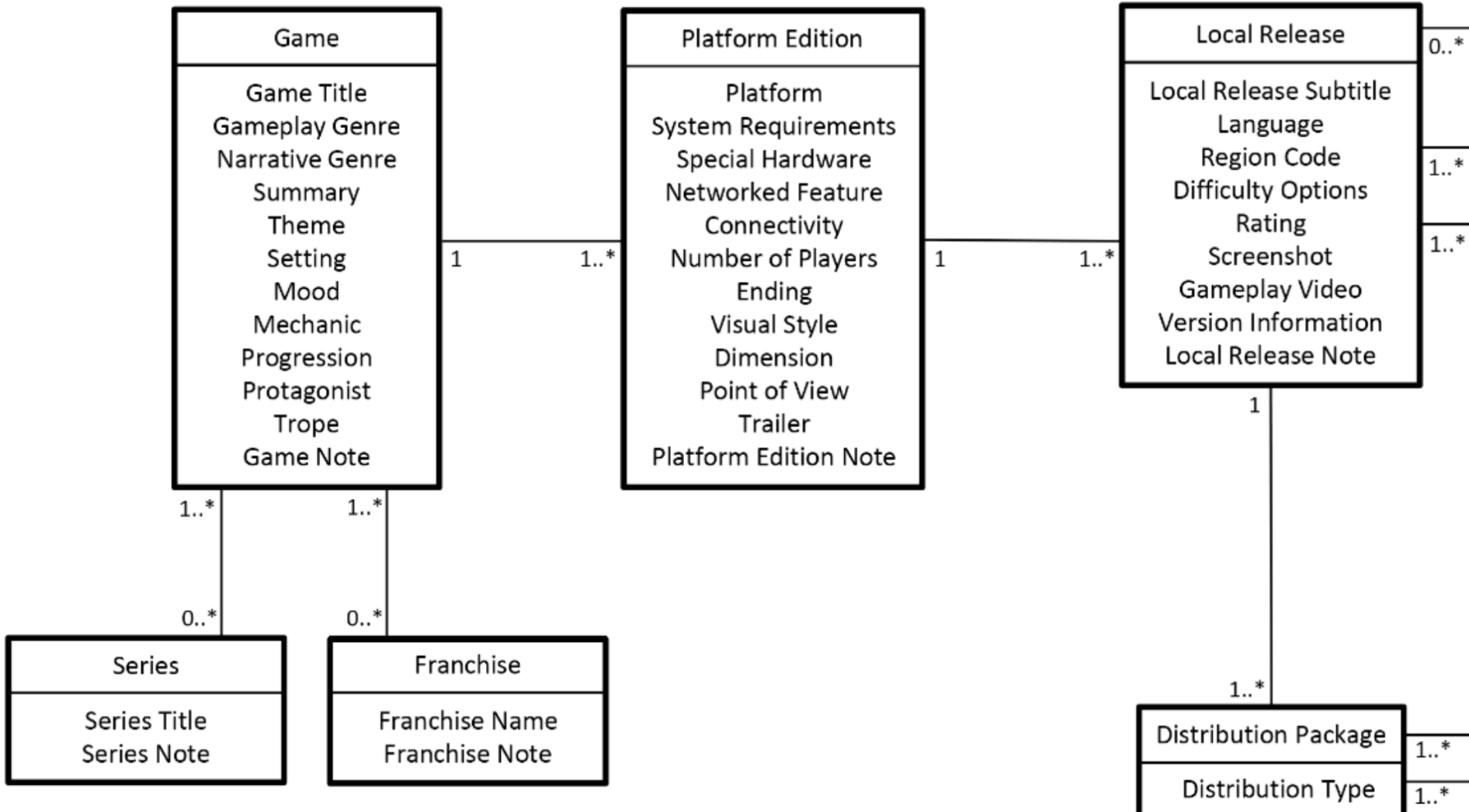
9 Entities

40+ Metadata Elements

10+ Controlled Vocabularies

Accessible at:
http://gamer.ischool.uw.edu/releases/


Game
Game Title
Gameplay Genre
Narrative Genre
Summary
Theme
Setting
Mood
Mechanic
Progression
Protagonist
Trope
Game Note
Platform Edition
Platform
System Requirements
Special Hardware
Networked Feature
Connectivity
Number of Players
Ending
Visual Style
Dimension
Point of View
Trailer
Platform Edition Note
Local Release
Local Release Subtitle
Language
Region Code
Difficulty Options
Rating
Screenshot
Gameplay Video
Version Information
Local Release Note
Additional Content
Content Name
Content Type
Version Requirement
Addl. Content Note
Collection
Collection Title
Collection Note
Agent
Agent Name
Agent Note
Series
Series Title
Series Note
Franchise
Franchise Name
Franchise Note
Distribution Package
Distribution Type
Digital Package
File Format
File Size
Retail Release Date
Representative Art
DRM
Price/MSRP
Distribution Package Note
Physical Package
Physical Format
Retail Release Date
Representative Art
Packaging
DRM
Price/MSRP
Distribution Package Note
1
1..*
0..*


Game
Game Title
Gameplay Genre
Narrative Genre
Summary
Theme
Setting
Mood
Mechanic
Progression
Protagonist
Trope
Game Note
Platform Edition
Platform
System Requirements
Special Hardware
Networked Feature
Connectivity
Number of Players
Ending
Visual Style
Dimension
Point of View
Trailer
Platform Edition Note
Local Release
Local Release Subtitle
Language
Region Code
Difficulty Options
Rating
Screenshot
Gameplay Video
Version Information
Local Release Note
Series
Series Title
Series Note
Franchise
Franchise Name
Franchise Note
Distribution Package
Distribution Type
1
1..*
0..*

Party	SN: These games are a collection of smaller games, or 'mini games', often meant to be played with a group of players in a casual competitive context. Representative games are *Mario Party* and *Wii Party*. USE FOR: Minigame Collection BT: Action
Platform	SN: These games have a focus on jumping or otherwise moving between different platforms and successfully navigating terrain and obstacles. They often emphasize hand eye coordination. Representative games are *Super Mario Bros. 3* and *Sonic the Hedgehog*. USE FOR: Platformer BT: Action
Platformer	USE: Platform
Rhythm	SN: These games involve the player inputting commands or completing actions while synchronizing to a rhythm. Representative games are *Space Channel 5* and *Donkey Conga*. BT: Music
Stealth	SN: These games have an emphasis on stealth and avoiding detection. Representative games are *Metal Gear Solid* and *Tenchu: Stealth Assassins*. BT: Action

Class: Metadata for Interactive Media

- Current research and practices
- User-focused research
- Analysis and design of metadata schemas
- Practical focus on group projects

Curating Collections of Video Game Development Artifacts

https://www.imls.gov/grants/awarded/lg-86-18-0060-18

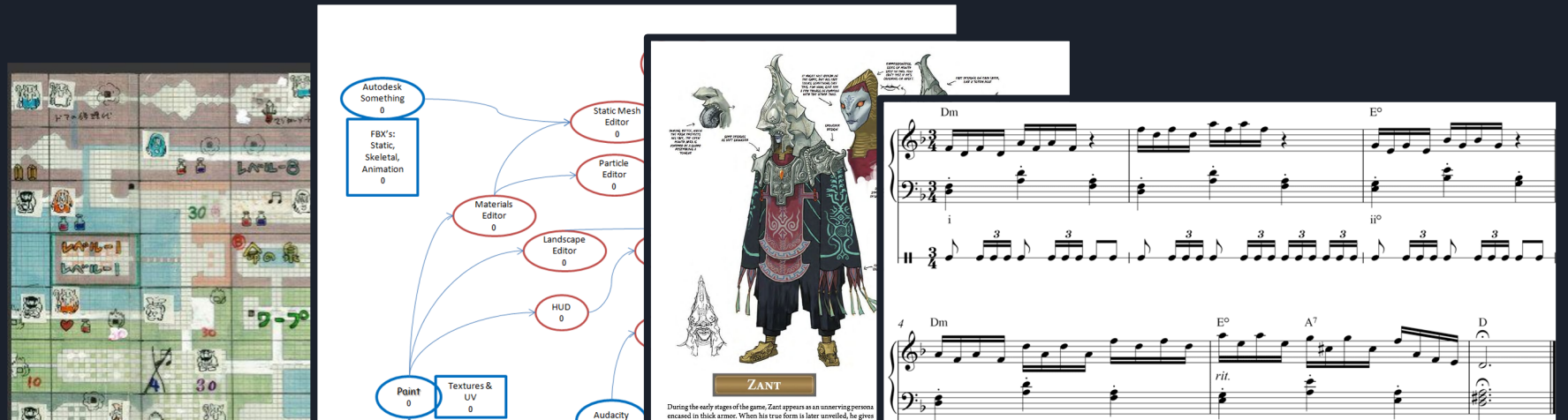
THE VIDEO GAME
HISTORY FOUNDATION

Motivation

Why do we want to preserve these game development artifacts?

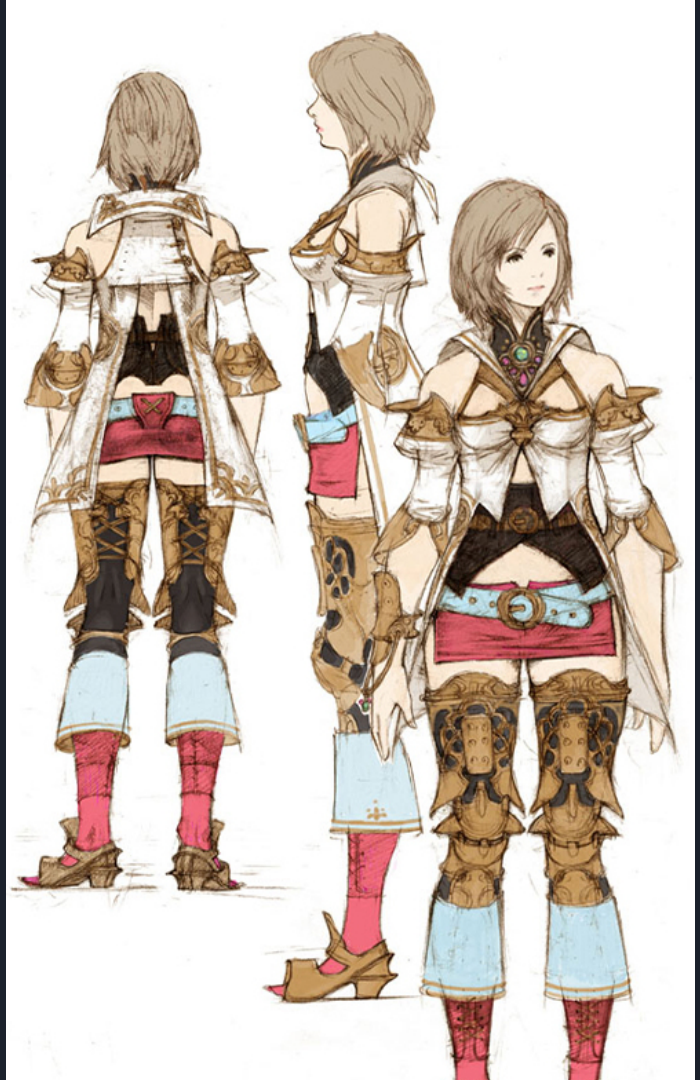
Goal

Produce a framework for cataloging artifacts related to the development of video games



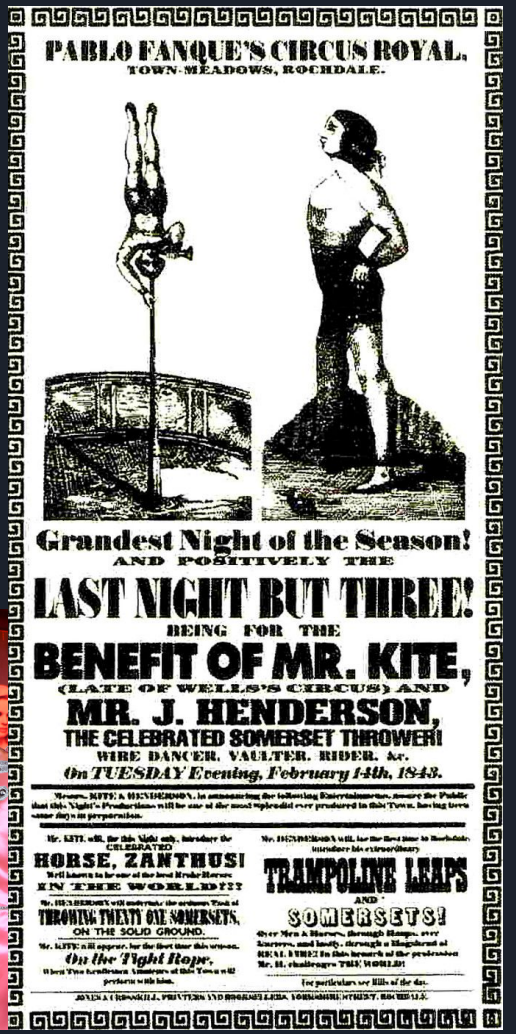
Development Artifacts

- Game design documents
- Technical design documents
- Musical scores
- Marketing materials
- Test builds
- Artwork
- …more



Development Artifacts

- Game design documents
- Technical design documents
- Musical scores
- Marketing materials
- Test builds
- Artwork
- …more



Research Questions

What artifacts are important?

What information is important when we describe these artifacts?

Research Questions

What needs do different stakeholders have? (librarians, museum curators, researchers, students, and users of libraries and museums)

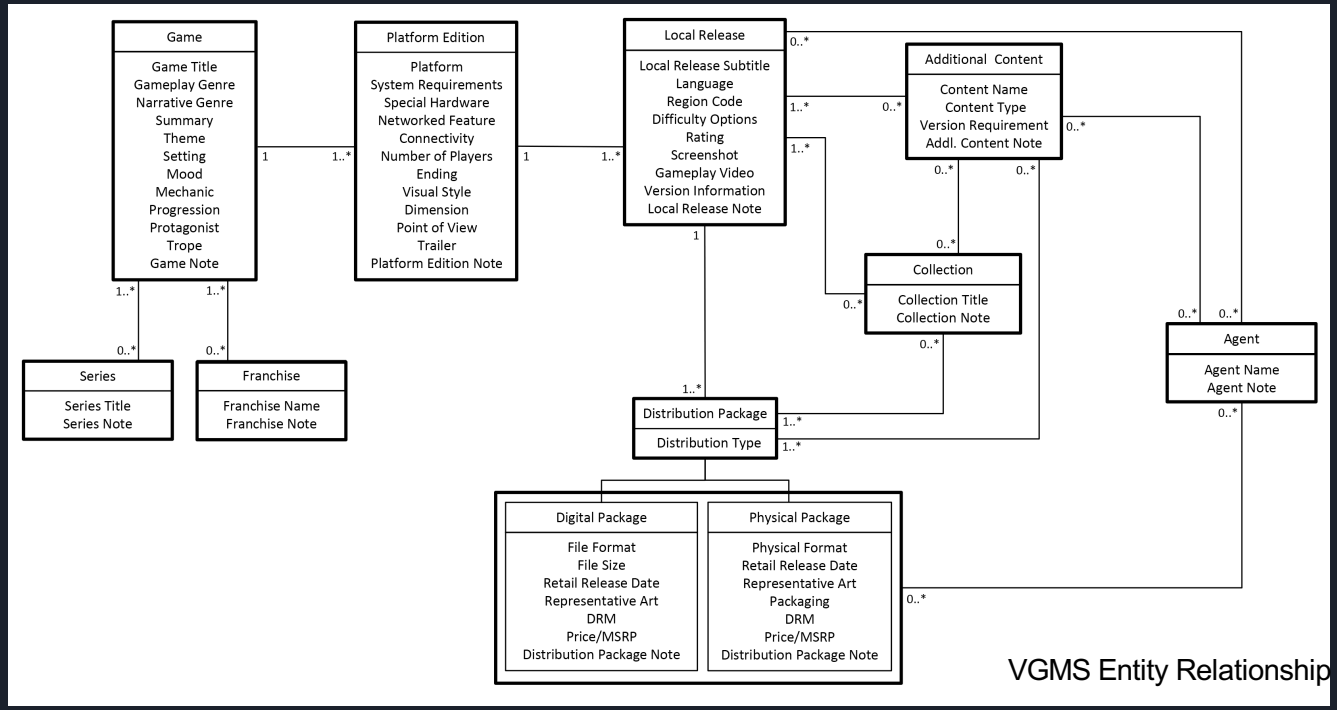
What issues and challenges emerge as we try to catalog sample collections?

Contributions

- Represent complex media objects
- Standardize cataloging for game related materials
- Extend and complement existing standards

Advisory Board

Phase I



VGMS Entity Relationship Diagram

Phase I

rld Video Game Hall of Fame
World Video Game Hall of
thestrong
Tetris
World of Warcraft
Super Mario Bros.
DOOM
GAME BOY
SEGA

Phase I

Phase II

SURVEY
n a scale of 1 to 5 wher
ow would you rate you
1
2
3
How likely
Excellent
Very Goo
Good

Phase II

IT Identity and Project Behavior

Information School
UNIVERSITY of WASHINGTON

GAMER
GAME RESEARCH GROUP

Marc Schmalz
mschmalz@uw.edu

My Background

01 Tabletop and Digital Games

02 Web Development and Project Management

03 2012 MSIM from the iSchool

My Academic Interests

01 IT Development ➢ Project Management ➢ Risk Management

02 IT ➢ Digital Games

03 Identity ➢ IT Identity

IT Identity

“The extent to which an individual views use of an IT as integral to his or her sense of self.”

—Carter & Grover, 2015

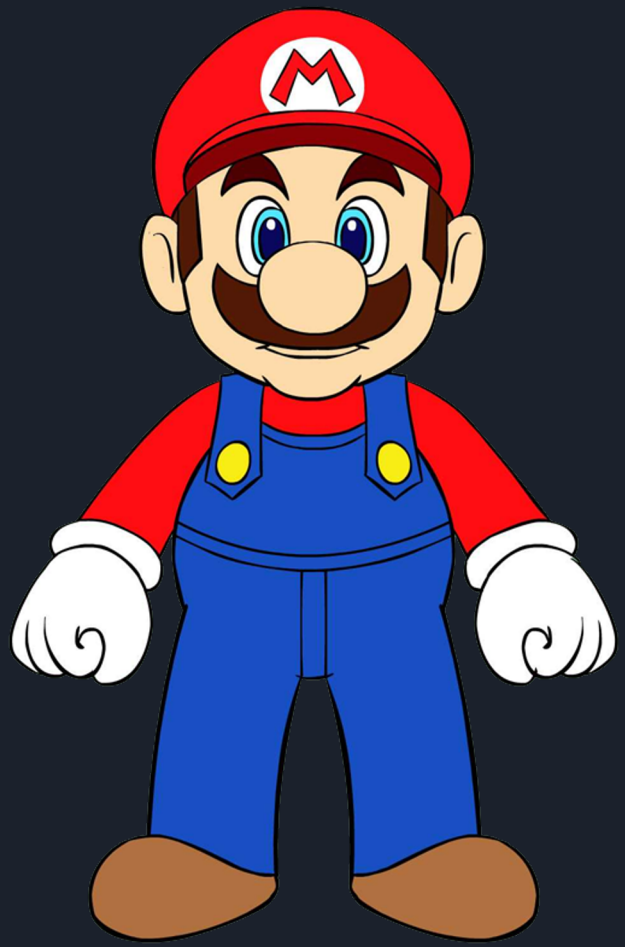
Structural Symbolic Interactionist Identity Theories

Structural Symbolic Interactionist Identity Theories

I am...

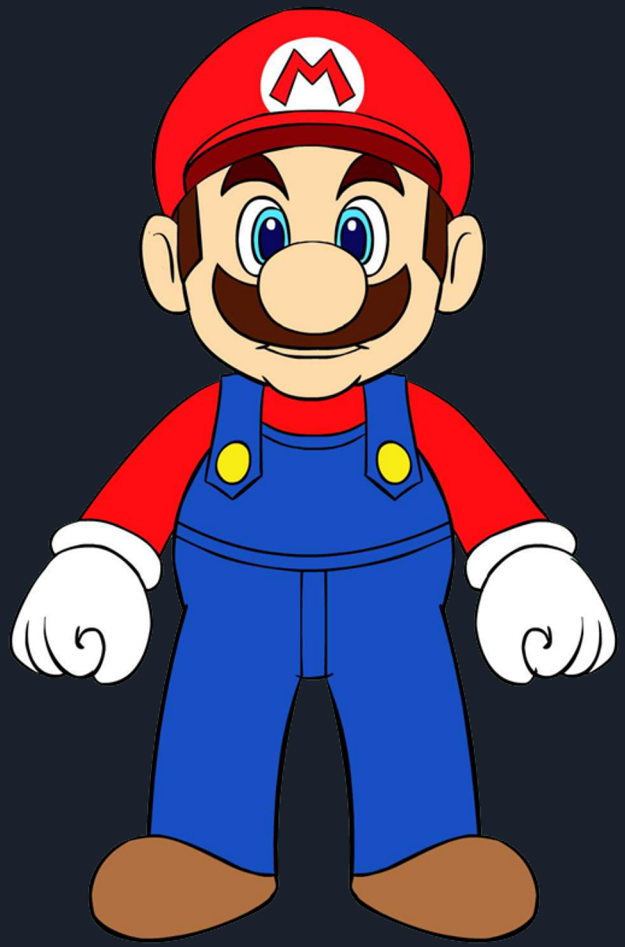
Structural Symbolic Interactionist Identity Theories

I am...



Structural Symbolic Interactionist Identity Theories

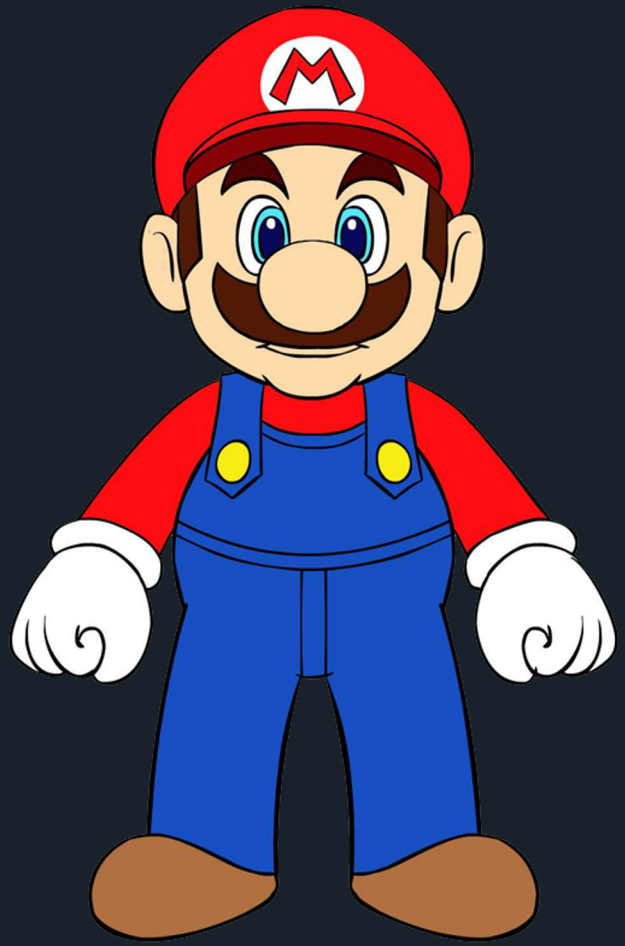
It’s-a me!...



Structural Symbolic Interactionist Identity Theories

It’s-a me!...

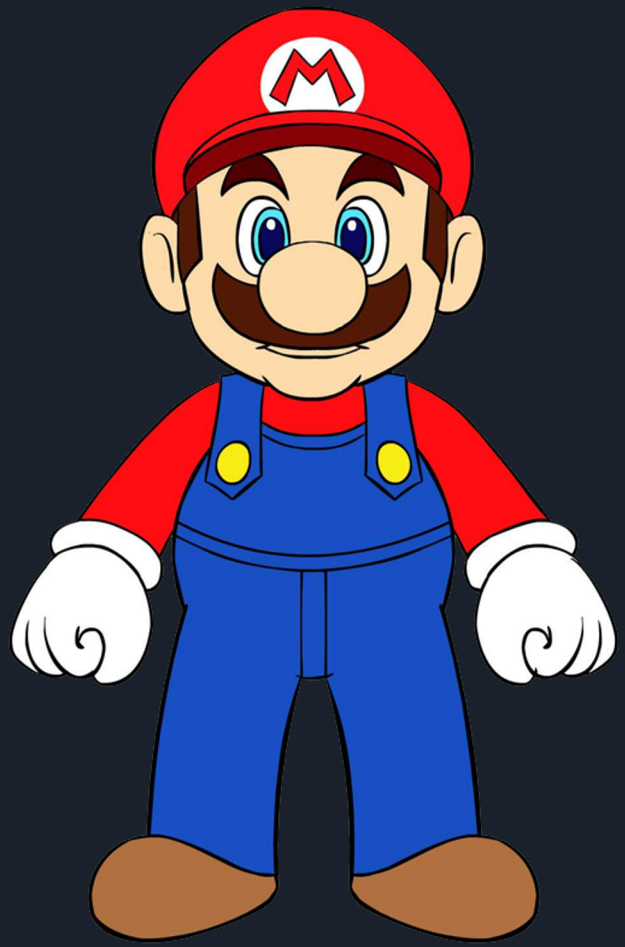
1. ...a plumber.
2. ...a doctor.
3. ...an older brother.



Structural Symbolic Interactionist Identity Theories

It’s-a me!...

1. ...a plumber.
2. ...a doctor.
3. ...an older brother.
4. ...Italian.



Structural Symbolic Interactionist Identity Theories

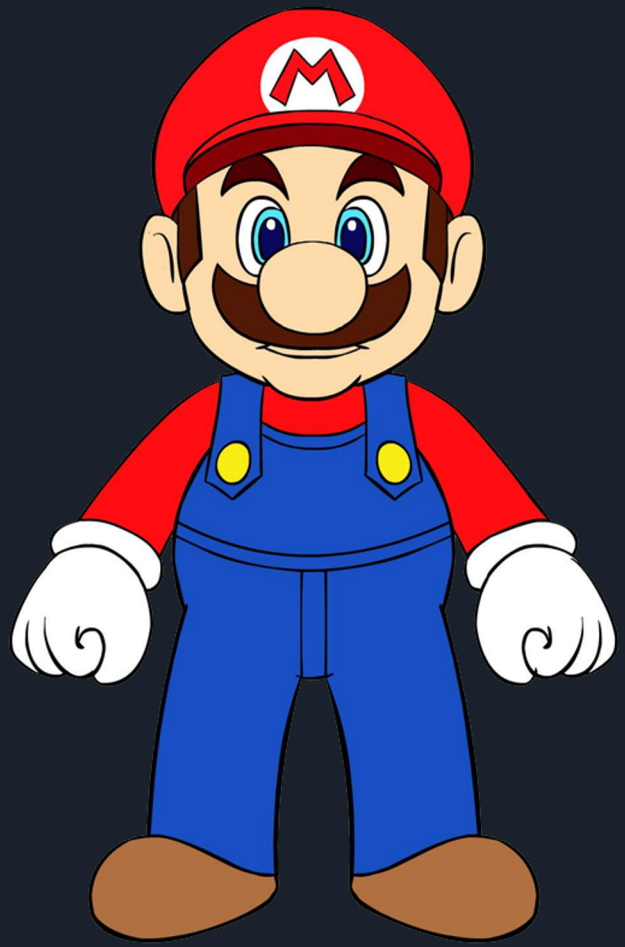
It’s-a me!...

1. ...a plumber.
2. ...a doctor.
3. ...an older brother.
4. ...Italian.
5. ...a romantic.
6. ...short.

Structural Symbolic Interactionist Identity Theories

It’s-a me!...

1. ...a plumber.
2. ...a doctor.
3. ...an older brother.
4. ...Italian.
5. ...a romantic.
6. ...short.
7. ...a mushrooms aficionado.
8. ...a coin collector.
9. ...my hats.



Structural Symbolic Interactionist Identity Theories

It’s-a me!...

1. ...a plumber.
2. ...a doctor.
3. ...an older brother.
4. ...Italian.
5. ...a romantic.
6. ...short.
7. ...a mushrooms aficionado.
8. ...a coin collector.
9. ...my hats.

Type of Identity

Role

Group

Person

Material

IT Identity

“The extent to which an individual views use of an IT as integral to his or her sense of self.”

—Carter & Grover, 2015

IT Identity

“The extent to which an individual views use of an IT as integral to his or her sense of self.”

—Carter & Grover, 2015

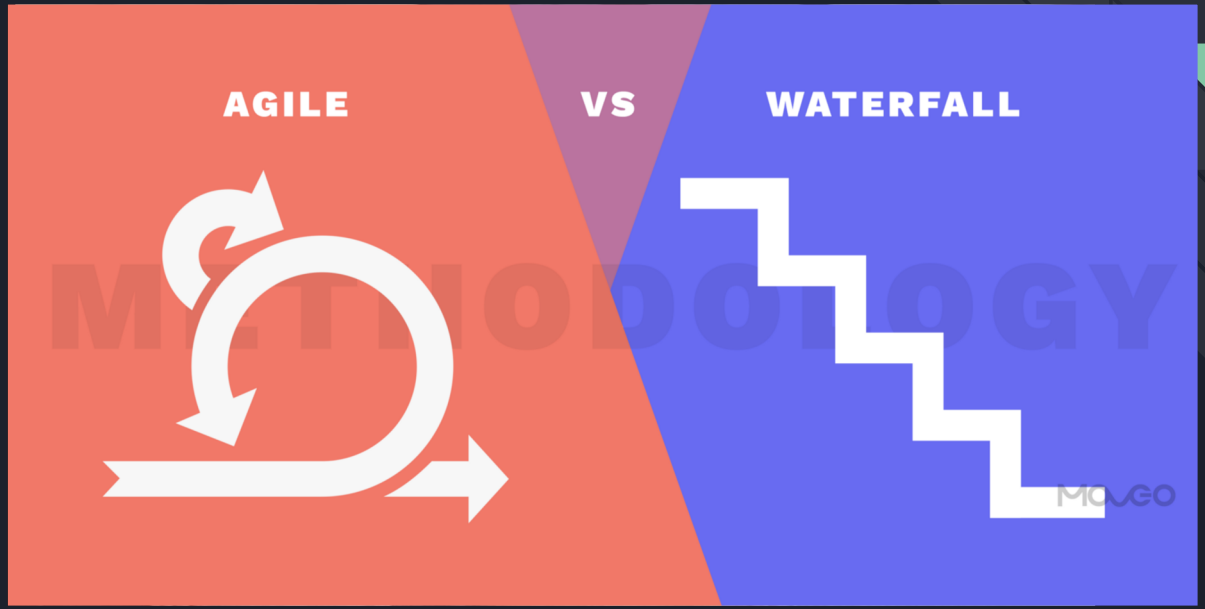
...or,

“Who am I in relation to an information technology?

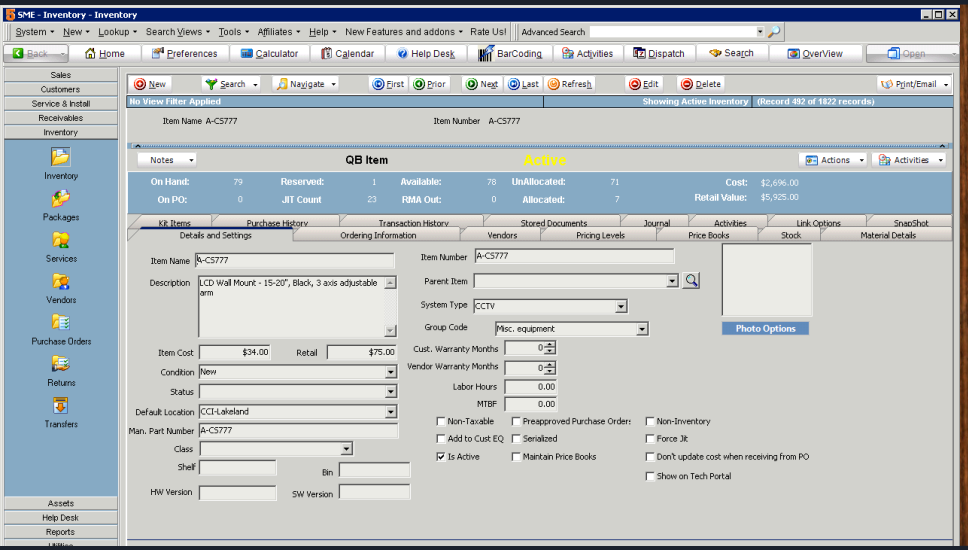
Identities are the Source of Behavior

Identities are the Source of Project Behavior

Agile Methods and IT Identity



Highly Consumerized Goods and IT Identity



My Research Question

In what ways, if any, does self-identification with an IT under development affect project team members' personal risk-related decision-making behavior on IT projects?

The GAMER Group

Information School
UNIVERSITY of WASHINGTON

GAMER
GAME RESEARCH GROUP

Marc Schmalz
mschmalz@uw.edu