

Strategic Wargame UI Analysis & Recommendations

TIER 1: Primary Influences

AGEOD System (Civil War II, Wars of Napoleon)

Architecture:

- Main map with zoom levels (strategic → operational → tactical)
- Left sidebar: "Decision Pack" with expandable sections
- Right sidebar: Unit/region details
- Bottom bar: Turn controls, time, resources
- Floating windows: Reports, diplomacy, production

Key Innovations:

- **Decision Pack Cards:** Collapsible sections for different domains
 - Military (corps, armies, units)
 - Economic (production, resources)
 - Diplomatic (relations, treaties)
 - Intelligence (enemy movements)
- **Unit Detail Panel:** Shows full unit composition, supply, morale, entrenchment
- **Chain of Command Visualization:** Corps → Division → Brigade hierarchy
- **Region Details:** Population, loyalty, resources, garrison requirements

What to Adopt: ☒ Decision Pack card system (perfect for our tabs) ☒ Detailed unit composition view ☒
Supply line visualization on map ☒ Separate "military operations" vs "strategic overview" views

Hearts of Iron IV

Architecture:

- Central map (dominant)
- Top bar: Resources, factories, political power
- Left sidebar (toggleable): Tech tree, focus tree, production
- Right sidebar: Selected unit/territory info
- Bottom: Theatre/army management, battle planner

Key Innovations:

- **Theatre System:** Group multiple armies under theatres

- **Battle Plan Painter:** Draw offensive lines, fallback lines
- **Division Designer:** Template-based unit creation
- **Supply Map Mode:** Dedicated layer showing supply hub ranges
- **Air Wings Panel:** Separate management for air assets

What to Adopt: ✅ Supply map mode (show supply propagation visually) ✅ Battle planner concept (for tactical group operations) ✅ Division template idea (for brigade type standardization) ❌ Too much automation (contradicts our constraint philosophy)

Gary Grigsby's War in the East

Architecture:

- Hex map (primary)
- Left panel: Unit list (hierarchical tree)
- Right panel: Detailed hex info
- Bottom: Multi-tab command interface
- Modal windows: Combat resolution, logistics, reports

Key Innovations:

- **Hierarchical Unit Tree:** Army Group → Army → Corps → Division
 - Expandable/collapsible
 - Shows supply state, readiness, HQ attachment
- **Logistics Detail Screen:** Dedicated view for supply network
- **Commander Details:** Leader traits affect subordinate units
- **Combat Prediction:** Shows odds before committing
- **End Turn Resolution:** Detailed phase-by-phase display

What to Adopt: ✅ Hierarchical unit tree (perfect for corps → brigades) ✅ Logistics detail screen (for supply/corridor management) ✅ Combat prediction (exhaustion cost preview) ✅ Detailed turn resolution phases

TIER 2: Supporting Influences

Unity of Command II

Best Feature: Objective-Based Operations

- Assign units to operational objectives

- Visual clarity: clean, readable map
- Supply dependency shown via HQ links
- "Prestige points" limit what you can do (similar to our exhaustion)

Adopt: ☒ Objective markers (directives visualized on map) ☒ HQ link visualization (supply chains) ☒

Action point economy (exhaustion as limiting factor)

Decisive Campaigns: Barbarossa

Best Feature: Decision Cards System

- Turn starts with "decisions" to make
- Each decision has trade-offs
- Affects morale, politics, logistics
- Some decisions locked based on game state

Adopt: ☒ Start-of-turn decision phase (issue directives) ☒ Trade-off visualization (exhaustion vs. gains) ☒

State-dependent options (early war vs. main war)

Shadow Empire

Best Feature: Multi-Layer Territory Management

- Strategic map → Operational map → Tactical map
- Different information at each zoom level
- Region cards show: population, production, unrest, assets
- Supply network explicitly modeled with logistics units

Adopt: ☒ Region card concept (municipality detail cards) ☒ Multi-layer information (don't show everything at once) ☒ Explicit supply network visualization

Command: Modern Operations

Best Feature: Mission-Based Orders

- Units assigned to missions (patrol, strike, support)
- Mission parameters define behavior
- Detailed sensor/weapons management

Adopt: ☒ Mission concept for tactical groups (assault, relief, defense) ☒ Too much micromanagement for our scope

SYNTHESIS: Recommended UI Architecture

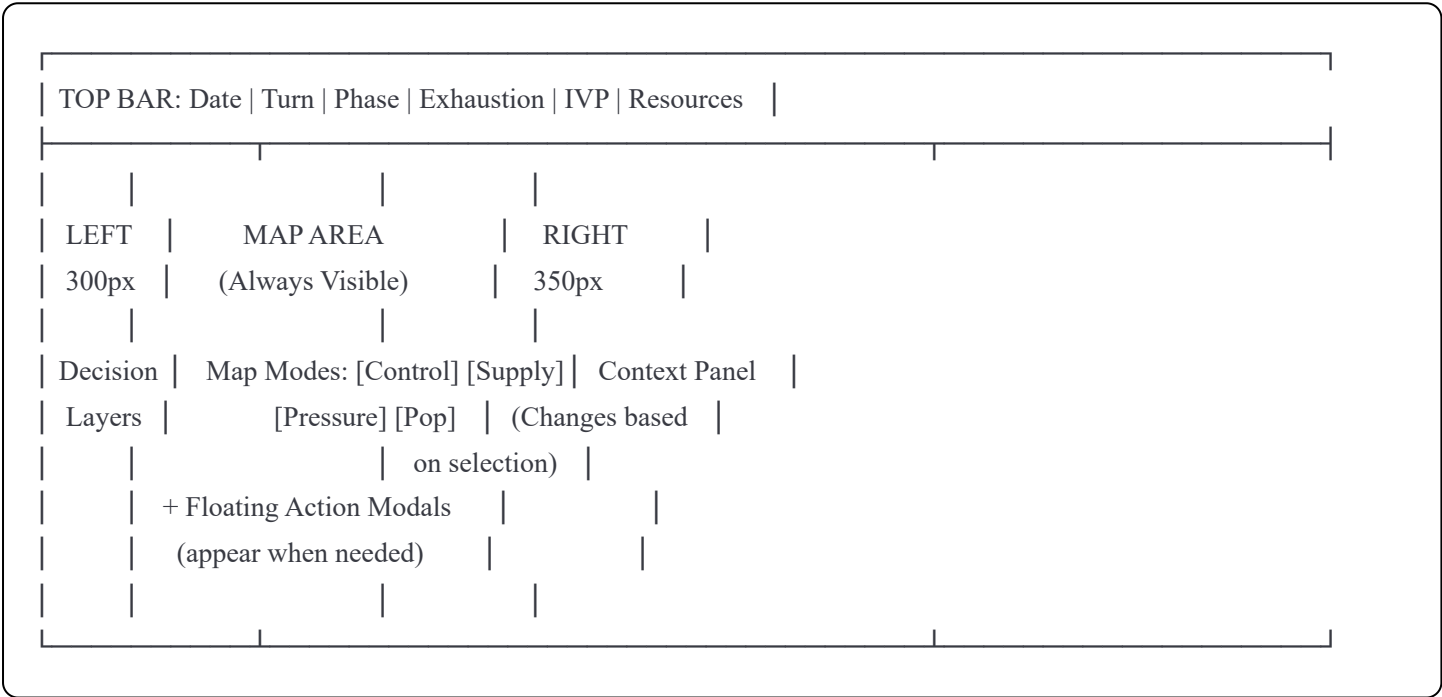
Core Philosophy

"Map as reference, panels as workspace"

Like AGEOD and Grigsby, the map is always visible but **panels are where decisions happen**.

RECOMMENDED UI SYSTEM

Layout: Fixed 3-Panel + Modal Overlays



LEFT PANEL: "Decision Layers" (AGEOD-inspired)

Expandable card system with **5 primary layers**:

1. Strategic Overview 🎯

▼ STRATEGIC OVERVIEW

Phase: Early War

Date: Sept 1991

Turn: 1

Exhaustion [30%]

IVP [12]

Active Directive:
→ None

[Issue Directive]

Critical Situations:
⚠ Sarajevo Under Press.
⚠ Posavina Threatened

2. Military Command 🇷🇸

▼ MILITARY COMMAND

Corps: [All ▼]

5th Corps (Bihać)
Brigades: 8
TGs Active: 1
[Expand]

1st Corps (Sarajevo)
Brigades: 12
TGs Active: 0
[Expand]

[Form Tactical Group]

[View All Brigades]

When expanded (Grigsby-style tree):

▼ 5th Corps (Bihać)

1st Cazin Bde

CR: 65%

State: Fixed

Slices: 0/3

[Select]

5th Bihać Bde

CR: 70%

State: Strained

Slices: 1/3 ▲

[Select]

TG-5 "Relief"

Target: Kljuc

Endurance: 2/4

[Manage]

3. Territory 🗺

▼ TERRITORY

Filter: [All ▼]

Sort: [Supply State ▼]

●

Goražde (Critical)

●

Tuzla (Strained)

●

Cazin (Adequate)

●

Zenica (Adequate)

[Show Map Filter]

Corridors:

Posavina: Open ✓

[Details]

4. Population & Refugees 👥

▼ POPULATION	
Controlled Pop: 2.1M	
Displaced: 45K	
Recent Displacement:	
• Prijedor → Tuzla	
2,400 people	
Refugee Concentrations:	
• Tuzla: 12K (Prijedor)	
[Form Refugee Bde]	
Hollowed Municipalities:	
△ Prijedor (-15%)	
△ Foča (-8%)	

5. Diplomacy & Events 📋

▼ DIPLOMACY & EVENTS	
IVP: 12 [—🔍]	
Recent:	
• Prijedor shock (+5)	
• Sarajevo siege (+2)	
Patron Status:	
Pressure: Low	
Next Check: Turn 5	
Peace Initiatives:	
None available	
RSK Stability: Stable	

RIGHT PANEL: Context Detail (changes based on selection)

When Nothing Selected:

SITUATION REPORT	
Turn Summary:	
• 3 TGs active	
• 2 municipalities	
under pressure	
• 1 brigade formed	
Warnings:	
⚠ Goražde supply crit.	
⚠ 5th Corps exhausted	
[View Detailed Report]	

When Municipality Selected: (as designed earlier)

Shows: Control, population, brigade, special status, actions

When Brigade Selected: (as designed earlier)

Shows: Stats, composition, detachment status, actions

When Corps Selected:

5TH CORPS	
HQ: Bihać	
Commander: [Name]	
Subordinate Brigades: 8	
Corps Status:	
Exhaustion: 35%	
Supply: Adequate	
Morale: Good	
Active Operations:	
• TG-5 → Ključ	
Status: In progress	
[View Details]	
Available Actions:	
[Form Tactical Group]	
[View Sector]	
[Transfer Brigade]	

MAP MODES (HOI4-inspired, buttons above map)

Not tabs - these change map visualization only:

- 1. **Effective Control** (default) - Standard political map
- 2. **Supply State** - Color by adequate/strained/critical
- 3. **Pressure** - Heat map of frontline pressure (0-100%)
- 4. **Population** - Ethnic composition
- 5. **Claims** - Overlapping claims visualization

MODAL WINDOWS (Grigsby-inspired, appear over map)

Turn Resolution Modal (Grigsby War in the East style)

TURN RESOLUTION: Oct 1991 → Nov 1991

Phase 1: Operations

✓ TG-5 advanced on Ključ [View]

✓ Defensive operations completed

Phase 2: Supply Calculation

⚠ Goražde: Adequate → Critical

✓ Posavina: Open (maintained)

Phase 3: Displacement

• Prijedor: 2,400 → Tuzla region

Phase 4: Exhaustion Update

ARBiH: +0.3 (2.1 total)

Reason: Active TG operations

Phase 5: Events

⚠ CIVILIAN SHOCK: Prijedor

Global IVP: 7 → 12 (+5)

[View Event Details]

[◀ Previous Phase] [Next Phase ▶]

[Complete Turn]

Form Tactical Group Modal (Unity of Command inspired)

FORM TACTICAL GROUP - 5th Corps

Step 1: Select Brigades

Available Brigades:

☐ 1st Cazin [Fixed] 0/3 slices

Cost: +5% exhaustion if deployed

☐ 5th Bihać [Strained] 1/3 slices Δ

Cost: +8% exhaustion (already strained)

☐ 3rd V.Kladuša [Fixed] 0/3 slices

Cost: +5% exhaustion if deployed

Selected: 0 slices (min 2 required)

Step 2: Mission Parameters

Target: [Select on map...]

Type: ☐ Assault ☐ Relief ☐ Defense

Predicted Outcome:

Success Chance: [Calculating...]

Exhaustion Cost: [Calculating...]

[Cancel]

[◀ Back]

[Form Group →]

Issue Directive Modal (Decisive Campaigns inspired)

ISSUE STRATEGIC DIRECTIVE

Current: None

Available Directives:

○ SARAJEVO DEFENSE PRIORITY

"All efforts focused on capital"

Effects:

+ Sarajevo supply priority

+ Relief operations easier

- Other fronts receive less support

- Exhaustion +0.1/turn elsewhere

[Select this Directive]

○ CORRIDOR PROTECTION

"Secure Posavina corridor"

Effects:

+ Corridor municipalities reinforced

+ Early warning of pressure

- Offensive operations restricted

- Cannot form TGs away from corridor

[Select this Directive]

⚠ Directives are binding for 3 turns min

⚠ Non-compliance increases exhaustion

[Cancel]

[Issue Directive]

INTERACTION PATTERNS

Pattern 1: Municipality-Centric Operations

1. Click municipality on map → Right panel shows details

2. Want to form brigade? → Click "Form Brigade" → Modal opens
3. Form brigade → Returns to map, brigade appears in Military Command layer
4. Click brigade in layer → Right panel switches to brigade view

Pattern 2: Brigade Management

1. Open Military Command layer
2. Expand corps tree
3. Click brigade → Right panel shows details, map highlights municipality
4. Want to detach? → "Provide Slice" button → Modal for TG formation

Pattern 3: Strategic Planning

1. Open Strategic Overview
2. See warning "Posavina Threatened"
3. Click warning → Map focuses on corridor, municipalities highlight
4. Click "Issue Directive" → Modal opens
5. Select "Corridor Protection" → Directive active, affects valid actions

Pattern 4: Turn Flow

1. Review situation in Overview
 2. Make decisions (form TGs, issue directives, form brigades)
 3. Click "End Turn" button (prominent, top bar)
 4. Turn Resolution modal appears
 5. Step through phases (Operations → Supply → Displacement → Exhaustion → Events)
 6. Click "Complete Turn"
 7. Map updates, new turn begins
-

KEY DESIGN DECISIONS

✅ ADOPT FROM AGEOD:

- Collapsible decision layers (not tabs, cards that expand)
- Rich detail panels
- Supply line visualization on map

✅ ADOPT FROM GRIGSBY:

- Hierarchical unit tree (Corps → Brigades)

- Detailed turn resolution phases
- Combat/operation prediction
- Logistics screen

✅ **ADOPT FROM HOI4:**

- Map modes (supply, pressure, etc.)
- Theatre concept (Corps in our case)
- Battle planner (for TG operations)

✅ **ADOPT FROM UNITY OF COMMAND:**

- Objective markers on map
- Clean visual language
- Action point economy (exhaustion)

✅ **ADOPT FROM DECISIVE CAMPAIGNS:**

- Start-of-turn decision cards
- Trade-off visualization
- Event system

❌ **AVOID:**

- Too much automation (contradicts constraints)
- Real-time elements (we're turn-based)
- Excessive micromanagement (Command MGRS)
- Hidden mechanics (transparency is key)

IMPLEMENTATION PRIORITY

Phase 1 (Foundation): ✅ **DONE**

- Basic game state
- Municipality data structure

Phase 2 (Core UI): **NEXT**

- Left panel decision layers
- Right context panel

- Map mode switching
- Click interactions

Phase 3 (Military):

- Corps/brigade tree
- Brigade detail view
- TG formation modal

Phase 4 (Operations):

- Turn resolution system
- Supply calculation
- Exhaustion updates
- Event system

Phase 5 (Polish):

- Directive system
- Advanced visualizations
- Tooltips and help
- Keyboard shortcuts

TECHNICAL IMPLEMENTATION NOTES

Panel System:

```
javascript

// Collapsible card system (AGEOD-style)
const decisionLayers = {
  strategic: { expanded: true, content: StrategicOverviewComponent },
  military: { expanded: false, content: MilitaryCommandComponent },
  territory: { expanded: false, content: TerritoryComponent },
  population: { expanded: false, content: PopulationComponent },
  diplomacy: { expanded: false, content: DiplomacyComponent }
};
```

Context Panel (React-like pattern):

```
javascript
```



```
// Right panel changes based on selection
```

```
function renderContextPanel() {  
  if (gameState.selectedBrigade) return BrigadeDetailView();  
  if (gameState.selectedMunicipality) return MunicipalityDetailView();  
  if (gameState.selectedCorps) return CorpsDetailView();  
  return SituationReportView();  
}
```

Modal Stack:

```
javascript
```

```
// Modals appear over map, can be stacked
```

```
const modalStack = [];  
  
function openModal(type, data) {  
  modalStack.push({ type, data });  
  renderModal(modalStack[modalStack.length - 1]);  
}
```

Map Modes:

```
javascript
```

```
// Map visualization modes
```

```
const mapModes = {  
  control: (mun) => getControlColor(mun.politicalControl),  
  supply: (mun) => getSupplyColor(mun.supplyState),  
  pressure: (mun) => getPressureColor(mun.pressureLevel),  
  population: (mun) => getEthnicColor(mun.population.ethnic)  
};
```

FINAL RECOMMENDATION

Use a hybrid approach:

- **AGEOD's collapsible decision layers** for the left panel
- **Grigsby's hierarchical trees** for military organization
- **HOI4's map modes** for visualization
- **Decisive Campaigns' decision cards** for directives
- **Unity of Command's clarity** for visual design

This gives you:

- **Depth** without overwhelming
- **Efficiency** for experienced players
- **Clarity** for new players
- **Respect** for the rulebook's constraint systems