

# Healthy Lifestyles for Europe (HL4EU)

## Data analysis: Cross-Sectoral Integration, Innovation, and Impact

De La Cruz Lastre L.D. , January 2026 | EIEIM

### 1. Summary

This report presents an analytical assessment of **136 good practices** collected under the *Healthy Lifestyles for Europe (HL4EU)* initiative by January 2026. The analysis examines partnership structures, innovation characteristics, sectoral coverage, and cross-sectoral integration, with a particular focus on how sectoral combinations relate to impact, sustainability, innovation diversity, and scalability.

Results indicate that good practices included in the HL4EU Database are characterized by strong public-private collaboration, a predominance of social and methodological innovation, and a high degree of cross-sectoral integration, particularly between health, physical activity, and community-oriented sectors. While multi-sectoral design is widespread, weighted analyses show that higher-impact, more sustainable, and more scalable good practices are associated with specific sectoral configurations, especially those involving institutional and governance-related domains.

The findings support evidence-based reflection on future programme design, highlighting opportunities to strengthen life-course balance, diversify sectoral engagement, and explicitly incentivize sustainability and scalability in funding criteria.

*Notes: For simplicity through the document, the word project = good practice; the equations and models were developed by the author in a context-sensitive manner with the needs and particularities of this dataset.*

### 2. Data Scope

The analysis is based on a harmonized dataset of **136 good practices**, including information on:

- Partnership type
- Innovation type
- Target age groups
- Sectoral involvement
- Geographic participation
- Good practice duration and continuity

- Qualitative outcome descriptions (aims and outcomes)

All variables were standardized and transformed into structured indicators to enable consistent portfolio-level analysis.

### 3. Partnership and Innovation Characteristics

#### 3.1 Partnership Types

**Figure 1** presents the distribution of partnership models.

Public–private partnerships account for **52.2%** of projects (71 projects), followed by public-only initiatives (**42.6%**, 58 projects). Purely private partnerships represent a small share (**5.1%**, 7 projects).

This distribution reflects a program design that prioritizes multi-actor collaboration, aligning with EU policy objectives promoting co-creation and shared responsibility in health promotion.

#### 3.2 Innovation Types and Overlap

**Figure 2** illustrates the overlap between technological, methodological, and social innovation.

- Social innovation appears in **64.7%** of projects.
- Methodological innovation appears in **63.2%**.
- Technological innovation is present in **16.2%**, rarely as a stand-alone component.

Approximately **36.8%** of projects combine social and methodological innovation, while only 0.7% integrate all three innovation types. This pattern highlights a portfolio oriented toward behavioural, social, and implementation-driven innovation, rather than technology-centric solutions.

### 4. Geographical Distribution of Good Practices

The geographical distribution of HL4EU projects is shown in **Figure 4**. Projects involve a wide range of European countries, with participation concentrated in **Western and Southern Europe**, while Central and Eastern European countries are comparatively less represented.

The map reflects project participation, not funding volume or coordination role. Countries with higher counts often participate as consortium members in multi-

country projects, indicating stronger integration into transnational networks rather than higher national funding intensity.

From a policy perspective, the observed distribution suggests scope for:

- Targeted capacity-building in underrepresented regions.
- Enhanced geographical balance in future calls.
- Leveraging established networks to promote knowledge transfer across Europe.

## 5. Sectoral Coverage and Target Groups

### 5.1 Sector Distribution

**Figure 5** shows that the most frequently addressed sectors are:

- **Physical Activity, Exercise & Sports** ( $\approx 95\%$  of projects),
- **Health** ( $\approx 88\%$ ),
- **Community** ( $\approx 59\%$ ).

Sectors such as Environmental Sustainability and Culture & Arts appear in fewer than 20% and 5% of projects respectively, indicating a relatively narrow sectoral focus despite broadly programmed objectives.

### 5.2 Age Groups and Sectoral Targeting

The age–sector heatmap (**Figure 3**) shows a strong emphasis on:

- Adults (26–64 years),
- Children (5–13 years) and adolescents (14–19 years).

Early childhood and older age groups are less frequently targeted across sectors, suggesting an imbalance in life-course coverage and potential areas for future strategic adjustment.

## 6. Sector Co-occurrence Analysis

### 6.1 Concept and Computation

Sector co-occurrence measures how often two sectors are addressed within the same project. For each sector pair  $(i, j)$ , co-occurrence is computed as:

$$C_{ij} = \sum_{p=1}^N \mathbb{1}_{ip} \cdot \mathbb{1}_{jp}$$

(De La Cruz Lastre L.D., 2026)

where  $\mathbb{1}_{ip} = 1$  if project  $p$  addresses sector  $i$ .

Matrices are presented as:

- **Absolute counts** (Figure 6a),
- **Percentages of total projects** (Figure 6b).

## 6.2 Baseline Co-occurrence Patterns

The strongest sectoral combinations are:

- Physical Activity & Health ( $\approx 90\%$  of projects),
- Physical Activity & Community ( $\approx 58\%$ ),
- Health & Community ( $\approx 51\%$ ).

This reveals a core triad of integration, around which most HL4EU projects are structured.

## 7. Operationalization of Qualitative Dimensions

### 7.1 Sustainability

Let  $E_i$  be start year,  $F_i$  end year, and  $T$  the current year:

$$D_i = \begin{cases} T - E_i, & \text{if ongoing} \\ F_i - E_i, & \text{if completed} \end{cases}$$

$$S_i = \begin{cases} \text{High,} & D_i \geq 10 \\ \text{Moderate,} & 5 \leq D_i < 10 \\ \text{Low,} & D_i < 5 \end{cases}$$

(De La Cruz Lastre L.D., 2026)

## 7.2 Scalability

$$C_i = \begin{cases} \text{Low,} & \text{single country} \\ \text{Moderate,} & \text{multiple countries, same continent} \\ \text{High,} & \text{two or more continents} \end{cases}$$

(De La Cruz Lastre L.D., 2026)

## 7.3 Innovation Diversity

$$I_i = \sum_{k=1}^3 \mathbb{1}_{ik}$$

$$D_i = \begin{cases} \text{Low,} & I_i = 1 \\ \text{Moderate,} & I_i = 2 \\ \text{High,} & I_i = 3 \end{cases}$$

(De La Cruz Lastre L.D., 2026)

## 7.4 Impact

Seven outcome domains were identified (policy, capacity, behavior, infrastructure, social, financial, health). Binary indicators  $O_{ij}$  were assigned via keyword-assisted detection:

$$B_i = \sum_{j=1}^7 O_{ij}$$

Ordinal scores were assigned:

$$s(\text{Low}) = 1, s(\text{Moderate}) = 2, s(\text{High}) = 3$$

Composite multiplier:

$$M_i = s(S_i) + s(D_i) + s(C_i)$$

Final impact score:

$$I_i = M_i \times B_i$$

Impact levels were classified using empirical percentiles:

$$\text{Impact}_i = \begin{cases} \text{Low,} & I_i \leq P_{33} \\ \text{Moderate,} & P_{33} < I_i \leq P_{67} \\ \text{High,} & I_i > P_{67} \end{cases}$$

(De La Cruz Lastre L.D., 2026)

## 8. Weighted Sector Co-occurrence Analysis

### 8.1 Interpretation of Weighted Plots

Weighted sector co-occurrence plots (Figures 7–10) aggregate joint sector participation while giving greater weight to projects with higher scores in impact, sustainability, innovation diversity, or scalability.

Higher values may reflect:

- frequent collaboration,
- concentration of high-quality projects,
- or both.

These plots are comparative and exploratory, not causal.

### 8.2 Key Findings

- **Impact-weighted co-occurrence (Figure 7)** highlights combinations involving Health, Physical Activity, Community, and Public Administration.
- **Sustainability-weighted co-occurrence (Figure 8)** shows stronger contributions from Equity and Community sectors.
- **Innovation-diversity-weighted co-occurrence (Figure 9)** emphasizes socially oriented sector combinations.
- **Scalability-weighted co-occurrence (Figure 10)** highlights governance and infrastructural sectors, including Public Administration and Mobility.

## 9. Policy Implications

The analysis suggests that:

- Sectoral integration is widespread but uneven in qualitative strength.

- High-performing projects exhibit strategic sectoral alignment, not simply sectoral breadth.
- Institutional and equity-oriented sectors enhance durability and scalability.

Future calls could benefit from: Broader sectoral diversification, Improved geographical balance, Explicit incentives for sustainability and scalability.

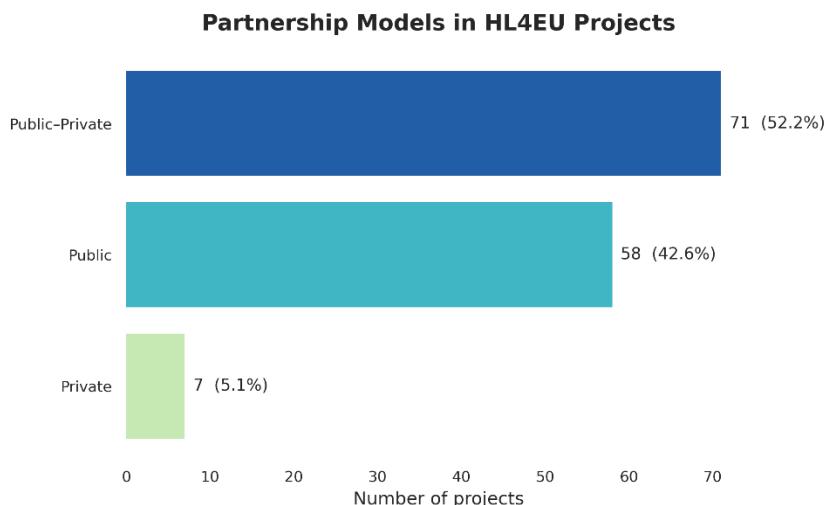
## 10. Conclusions

HL4EU demonstrates a mature, integrative approach to healthy lifestyle promotion. By combining structural and weighted analyses, this report shows that the quality of cross-sector collaboration matters as much as its frequency.

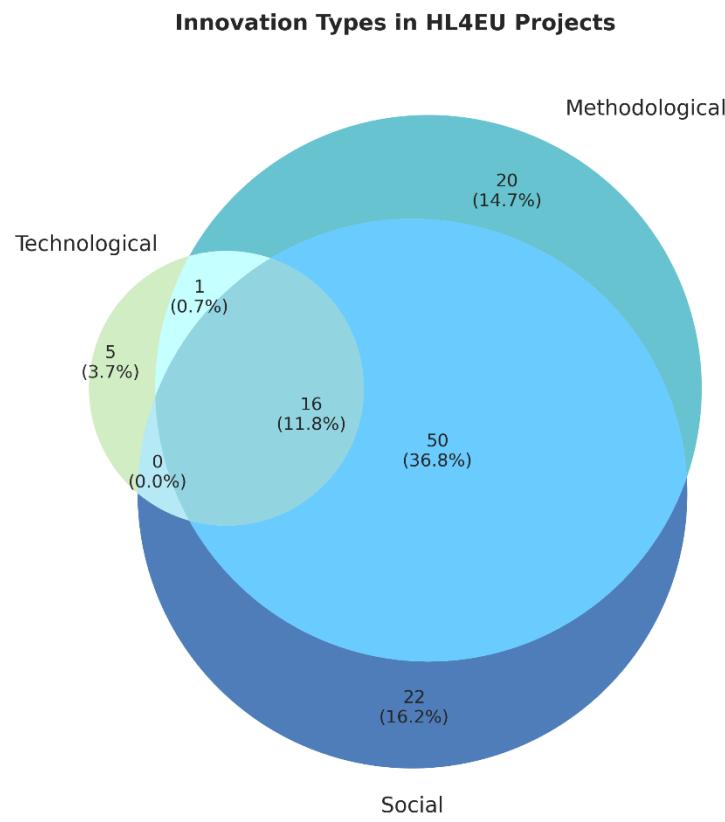
The methodological framework developed here offers a transparent, reproducible model for future programme-level evaluations and supports evidence-informed policy design.

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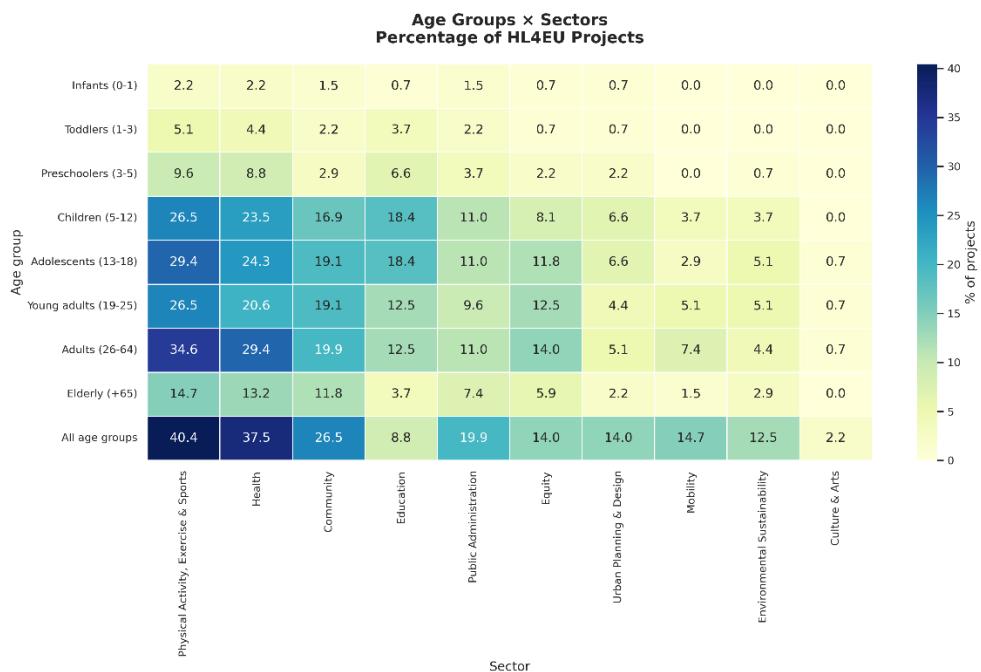
### 1. Figure 1 – Distribution of Partnership Type/Models



### 2. Figure 2 – Venn Diagram of Innovation Type



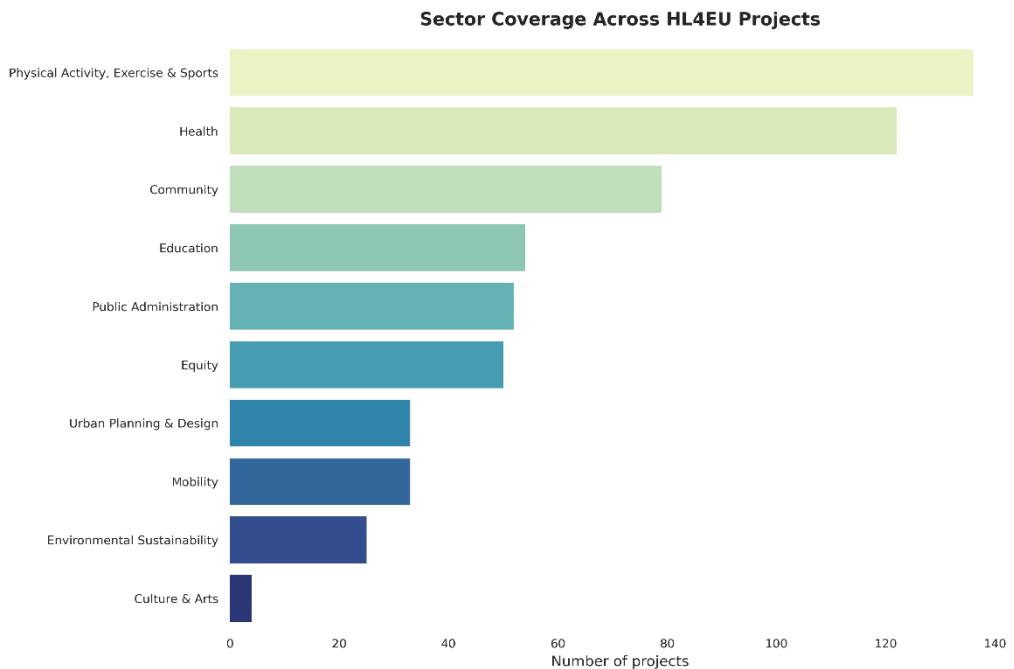
3. **Figure 3 – Age Groups × Sectors Heatmap (% of good practices)**



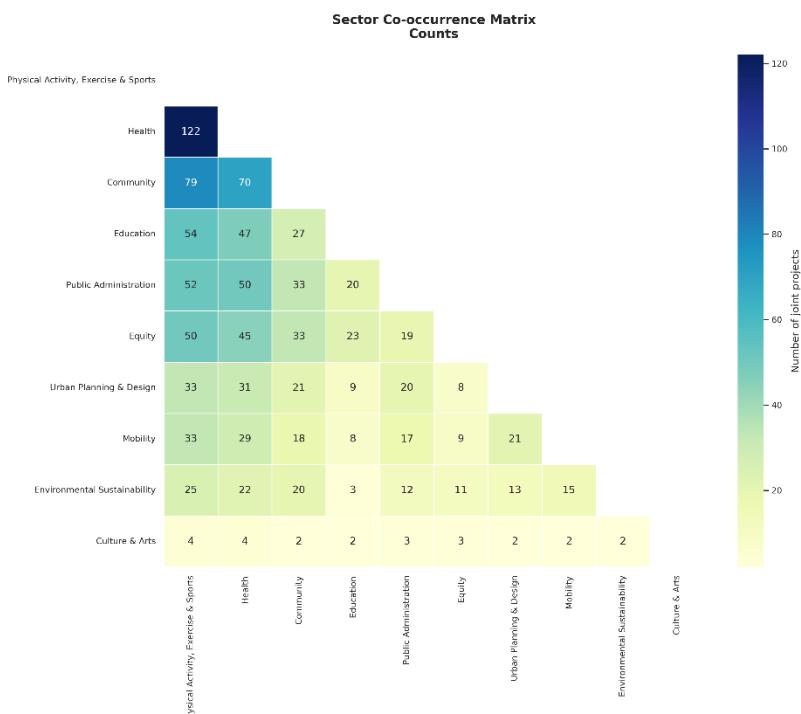
4. **Figure 4 – Geographical Distribution of good practices participation**

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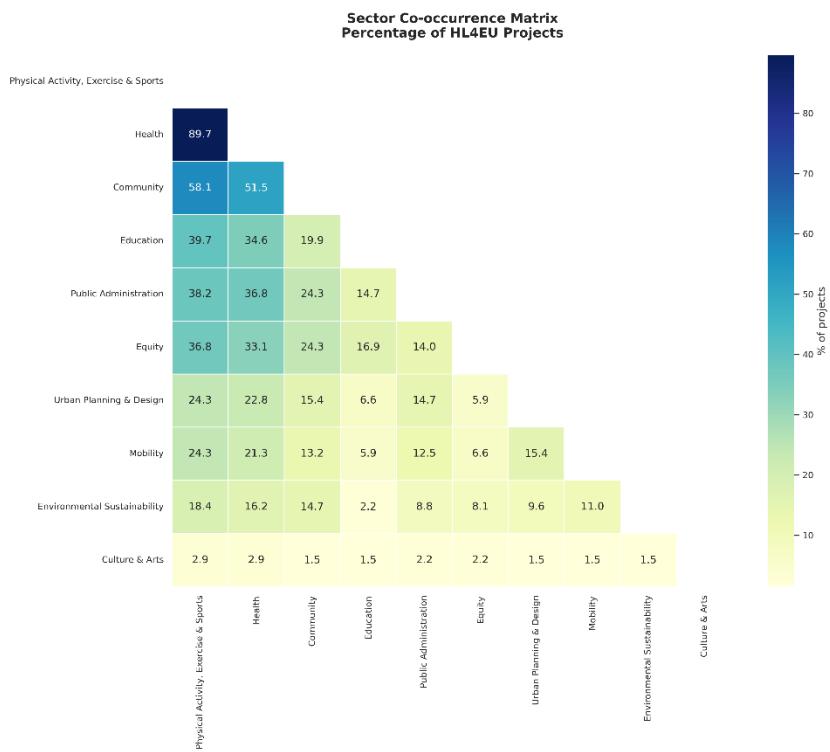
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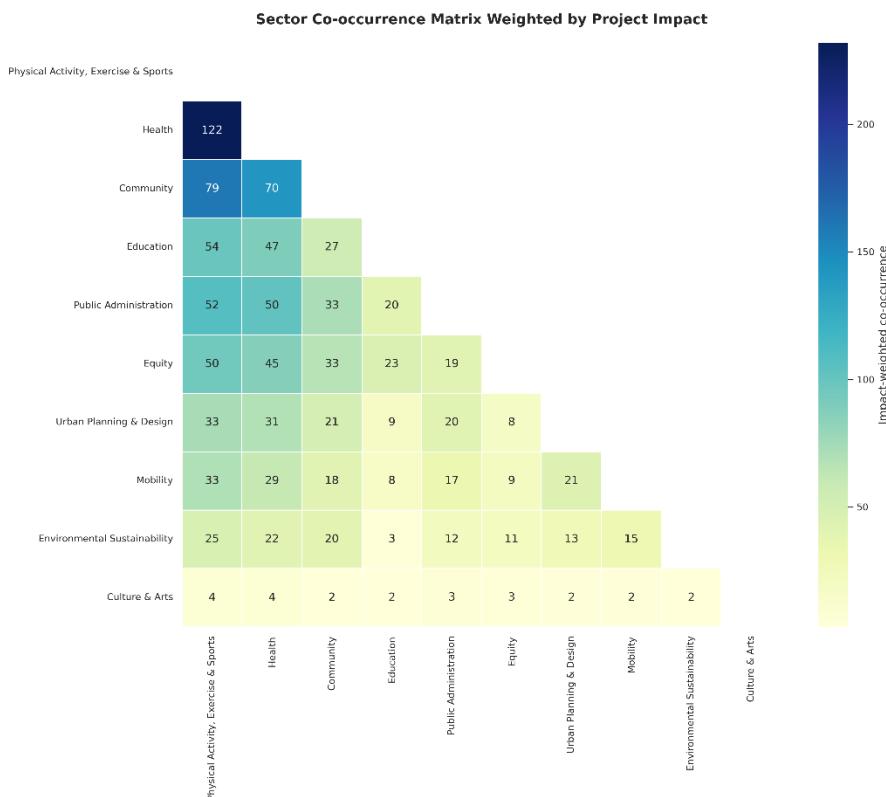
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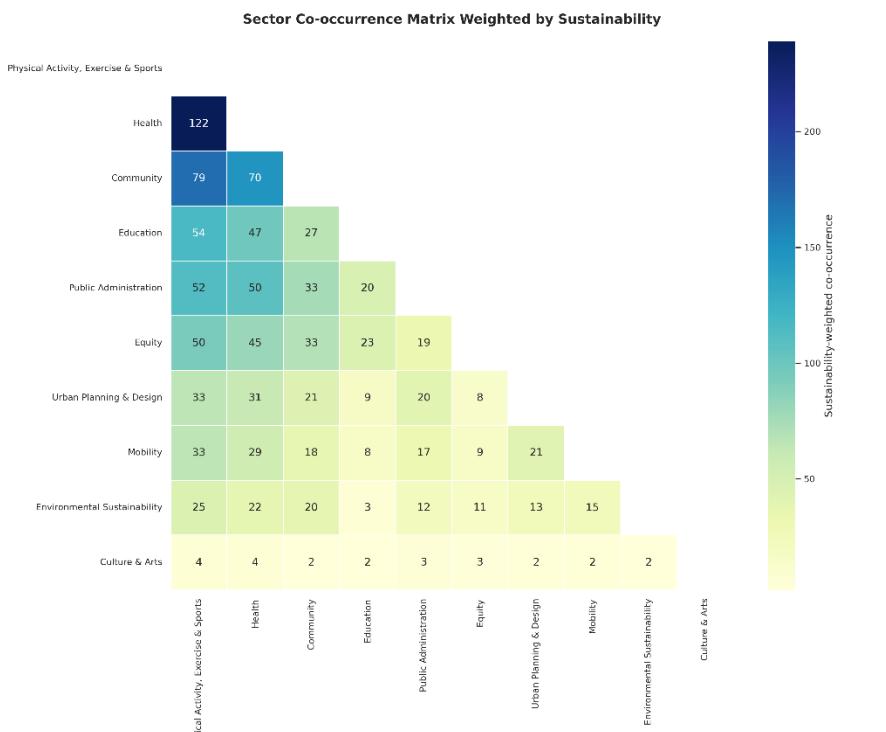
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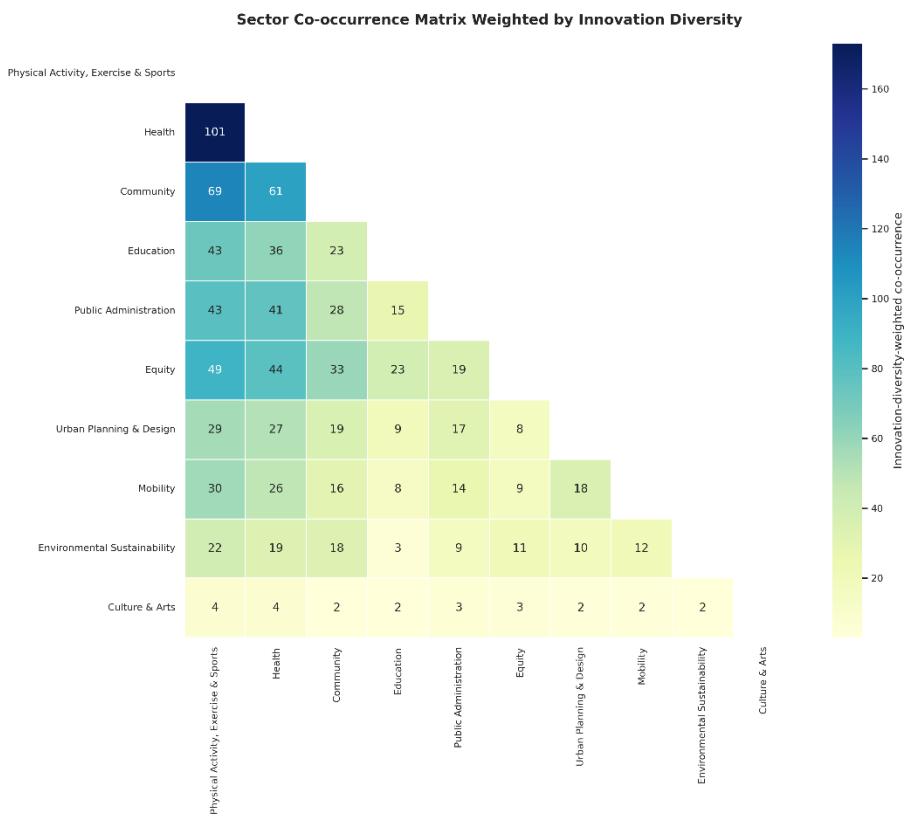
## 8. Figure 7 – Impact-Weighted Sector Co-occurrence Matrix



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10. **Figure 9 – Innovation Diversity-Weighted Sector Co-occurrence Matrix**



**11. Figure 10 – Scalability-Weighted Sector Co-occurrence Matrix**

