# System Performance

Table : System Performance

|  |  |  |
| --- | --- | --- |
|  | **Precision@10** | **NDCG10** |
| **TaskSieve** | 0.862 | 0.917 |
| **VIBE** | 0.914 | 0.963\* |
| **VIBE+NE** | 0.890 | 0.948\* |

p < 0.05, compared to the baseline



Figure : Precisio@10



Figure : NDCG



Figure : Horizontal positions of Top 10 documents (overall)



Figure : Horizontal positions of Top 10 documents (after UM built)



Figure : Location change of Top 10 documents by time



Figure : Precision change of Top10 documents by time

# System + User Performance – open precision

Table : Open Precision

|  |  |
| --- | --- |
|  | **Open Precision** |
| **TaskSieve** | 0.950 |
| **VIBE** | 0.875 |
| **VIBE + NE** | 0.875 |

Table : Rank of open documents

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Open Rank** | **Open Rank (Relevant)** | **Saved Rank** | **Saved Rank (Relevant)** |
| **TaskSieve** | 4.00 | 3.96 | 3.63 | 3.60 |
| **VIBE** | 21.76 | 13.26 | 10.73 | 9.44 |
| **VIBE + NE** | 24.40 | 10.77 | 11.43 | 11.49 |

Table 4 and 5 show the number of topic clusters (out of 10 per topic), where visualizations found more clusters than the baseline.

Table : Topic cluster of open documents

|  |  |  |  |
| --- | --- | --- | --- |
|  | **40009** | **40021** | **40048** |
| **TaskSieve** | 7 | 8 | 9 |
| **VIBE** | 9 | 9 | 9 |
| **VIBE + NE** | 9 | 9 | 8 |

Table : Topic cluster of saved documents

|  |  |  |  |
| --- | --- | --- | --- |
|  | **40009** | **40021** | **40048** |
| **TaskSieve** | 5 | 7 | 8 |
| **VIBE** | 7 | 8 | 8 |
| **VIBE + NE** | 8 | 9 | 7 |

# User Performance – note precision





|  |  |  |
| --- | --- | --- |
|  | **Sum of Precision** | **Count of High Precision Notes (>= 0.9)** |
| TaskSieve | 362.98 | 343 |
| VIBE | 397.86 | 379 |
| VIBE + NE | 366.17 | 355 |