# 2.1.1. ANOVA táblák a K-means módszerre (2-6 rendre)

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Zscore(budget) | Between Groups | 42,886 | 1 | 42,886 | 97,135 | ,000 |
| | Within Groups | 33,114 | 75 | ,442 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(revenue) | Between Groups | 46,451 | 1 | 46,451 | 117,897 | ,000 |
| | Within Groups | 29,549 | 75 | ,394 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(popularity) | Between Groups | 41,952 | 1 | 41,952 | 92,412 | ,000 |
| | Within Groups | 34,048 | 75 | ,454 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(runtime) | Between Groups | 8,175 | 1 | 8,175 | 9,040 | ,004 |
| | Within Groups | 67,825 | 75 | ,904 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_average) | Between Groups | 18,440 | 1 | 18,440 | 24,028 | ,000 |
| | Within Groups | 57,560 | 75 | ,767 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_count) | Between Groups | 55,533 | 1 | 55,533 | 203,503 | ,000 |
| | Within Groups | 20,467 | 75 | ,273 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(age) | Between Groups | 7,710 | 1 | 7,710 | 8,467 | ,005 |
| | Within Groups | 68,290 | 75 | ,911 | | |
| | Total | 76,000 | 76 | | | |

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Zscore(budget) | Between Groups | 42,042 | 2 | 21,021 | 45,807 | ,000 |
| | Within Groups | 33,958 | 74 | ,459 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(revenue) | Between Groups | 48,130 | 2 | 24,065 | 63,899 | ,000 |
| | Within Groups | 27,870 | 74 | ,377 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(popularity) | Between Groups | 39,956 | 2 | 19,978 | 41,017 | ,000 |
| | Within Groups | 36,044 | 74 | ,487 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(runtime) | Between Groups | 12,001 | 2 | 6,001 | 6,938 | ,002 |
| | Within Groups | 63,999 | 74 | ,865 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_average) | Between Groups | 18,106 | 2 | 9,053 | 11,572 | ,000 |
| | Within Groups | 57,894 | 74 | ,782 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_count) | Between Groups | 56,717 | 2 | 28,359 | 108,830 | ,000 |
| | Within Groups | 19,283 | 74 | ,261 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(age) | Between Groups | 48,197 | 2 | 24,098 | 64,139 | ,000 |
| | Within Groups | 27,803 | 74 | ,376 | | |
| | Total | 76,000 | 76 | | | |

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Zscore(budget) | Between Groups | 43,523 | 3 | 14,508 | 32,609 | ,000 |
| | Within Groups | 32,477 | 73 | ,445 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(revenue) | Between Groups | 49,736 | 3 | 16,579 | 46,080 | ,000 |
| | Within Groups | 26,264 | 73 | ,360 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(popularity) | Between Groups | 43,692 | 3 | 14,564 | 32,907 | ,000 |
| | Within Groups | 32,308 | 73 | ,443 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(runtime) | Between Groups | 36,862 | 3 | 12,287 | 22,918 | ,000 |
| | Within Groups | 39,138 | 73 | ,536 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_average) | Between Groups | 30,934 | 3 | 10,311 | 16,703 | ,000 |
| | Within Groups | 45,066 | 73 | ,617 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_count) | Between Groups | 57,775 | 3 | 19,258 | 77,138 | ,000 |
| | Within Groups | 18,225 | 73 | ,250 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(age) | Between Groups | 45,526 | 3 | 15,175 | 36,353 | ,000 |
| | Within Groups | 30,474 | 73 | ,417 | | |
| | Total | 76,000 | 76 | | | |

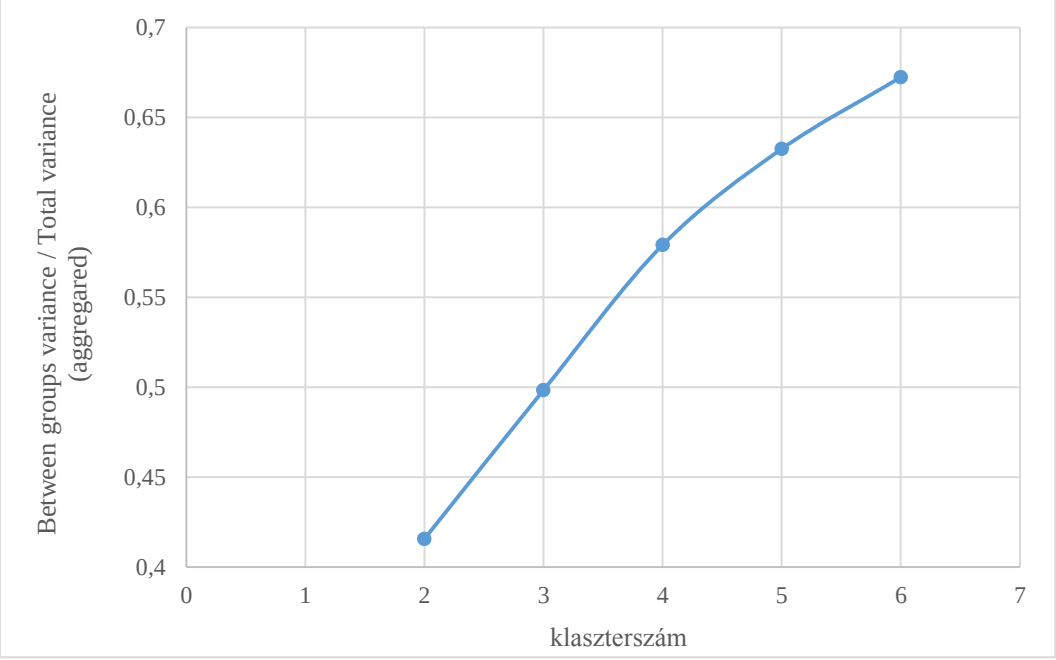
**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Zscore(budget) | Between Groups | 51,495 | 4 | 12,874 | 37,825 | ,000 |
| | Within Groups | 24,505 | 72 | ,340 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(revenue) | Between Groups | 61,109 | 4 | 15,277 | 73,870 | ,000 |
| | Within Groups | 14,891 | 72 | ,207 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(popularity) | Between Groups | 47,093 | 4 | 11,773 | 29,325 | ,000 |
| | Within Groups | 28,907 | 72 | ,401 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(runtime) | Between Groups | 31,609 | 4 | 7,902 | 12,817 | ,000 |
| | Within Groups | 44,391 | 72 | ,617 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_average) | Between Groups | 30,125 | 4 | 7,531 | 11,820 | ,000 |
| | Within Groups | 45,875 | 72 | ,637 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_count) | Between Groups | 63,905 | 4 | 15,976 | 95,104 | ,000 |
| | Within Groups | 12,095 | 72 | ,168 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(age) | Between Groups | 51,124 | 4 | 12,781 | 36,994 | ,000 |
| | Within Groups | 24,876 | 72 | ,345 | | |
| | Total | 76,000 | 76 | | | |

**ANOVA**

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| Zscore(budget) | Between Groups | 51,578 | 5 | 10,316 | 29,989 | ,000 |
| | Within Groups | 24,422 | 71 | ,344 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(revenue) | Between Groups | 58,817 | 5 | 11,763 | 48,605 | ,000 |
| | Within Groups | 17,183 | 71 | ,242 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(popularity) | Between Groups | 64,027 | 5 | 12,805 | 75,933 | ,000 |
| | Within Groups | 11,973 | 71 | ,169 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(runtime) | Between Groups | 34,483 | 5 | 6,897 | 11,794 | ,000 |
| | Within Groups | 41,517 | 71 | ,585 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_average) | Between Groups | 34,285 | 5 | 6,857 | 11,671 | ,000 |
| | Within Groups | 41,715 | 71 | ,588 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(vote_count) | Between Groups | 64,614 | 5 | 12,923 | 80,580 | ,000 |
| | Within Groups | 11,386 | 71 | ,160 | | |
| | Total | 76,000 | 76 | | | |
| Zscore(age) | Between Groups | 49,840 | 5 | 9,968 | 27,054 | ,000 |
| | Within Groups | 26,160 | 71 | ,368 | | |
| | Total | 76,000 | 76 | | | |

## 2.1.2. Klaszterkönyököt bemutató ábra



### 2.2.1. K-means végleges klaszterközépponttól vett távolság és klasztagságok száma

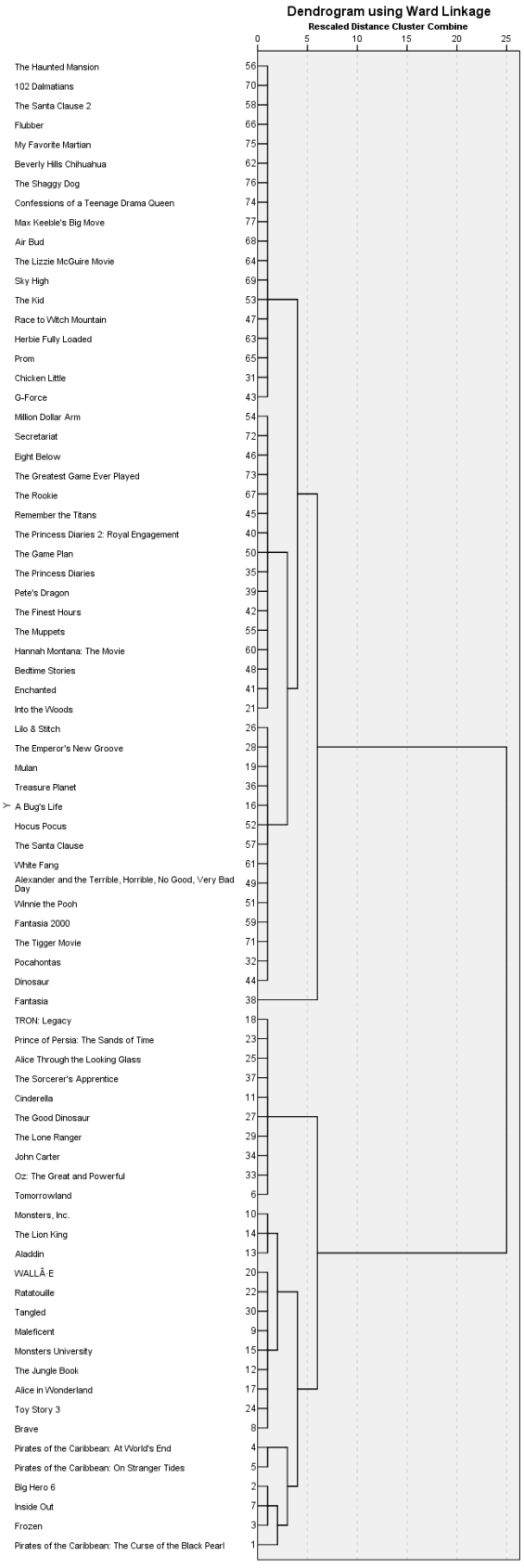
**Final Cluster Centers**

| | Cluster | | | |
|---|---|---|---|---|
| | 1 | 2 | 3 | 4 |
| Zscore(budget) | -1,22567 | -,47711 | ,63279 | 1,71140 |
| Zscore(revenue) | -,74295 | -,55782 | 1,29036 | ,67594 |
| Zscore(popularity) | -,35831 | -,53909 | ,97418 | 1,22220 |
| Zscore(runtime) | 1,12496 | -,23456 | -,29043 | 1,97886 |
| Zscore(vote_average) | ,98564 | -,40924 | 1,09498 | -,02915 |
| Zscore(vote_count) | -,52908 | -,61743 | 1,30111 | ,99760 |
| Zscore(age) | 6,50475 | ,03941 | -,24598 | -,50592 |

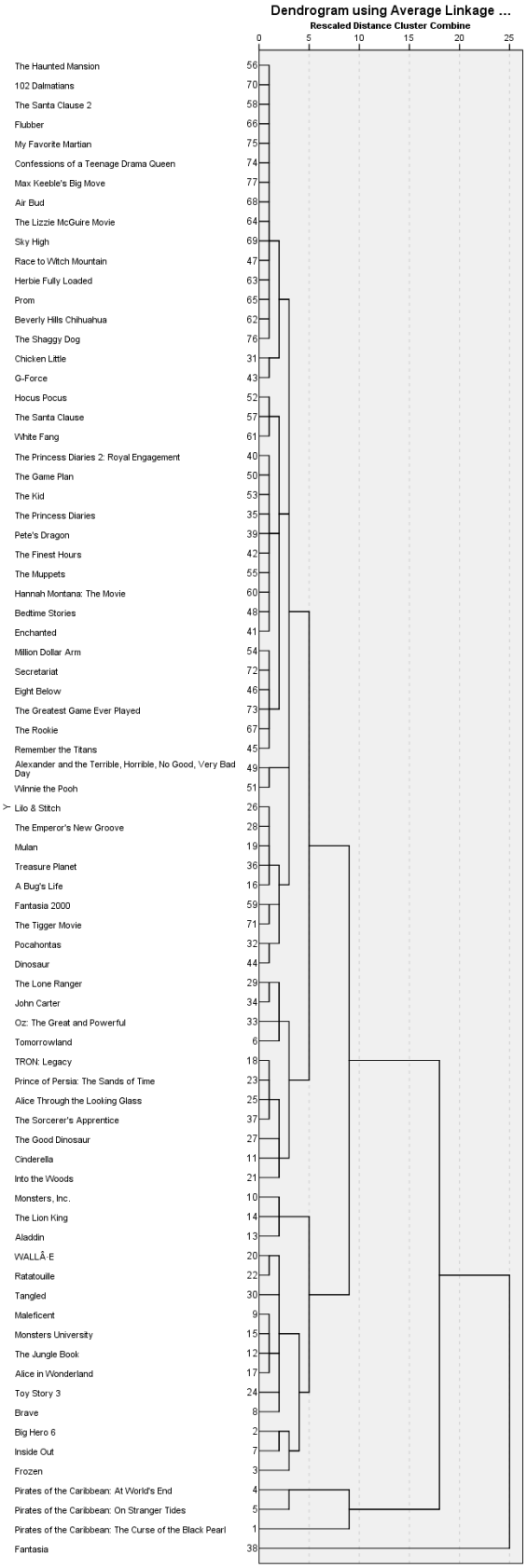
**Number of Cases in each Cluster**

| | | |
|---|---|---|
| Cluster | 1 | 1,000 |
| | 2 | 50,000 |
| | 3 | 18,000 |
| | 4 | 8,000 |
| Valid | | 77,000 |
| Missing | | ,000 |

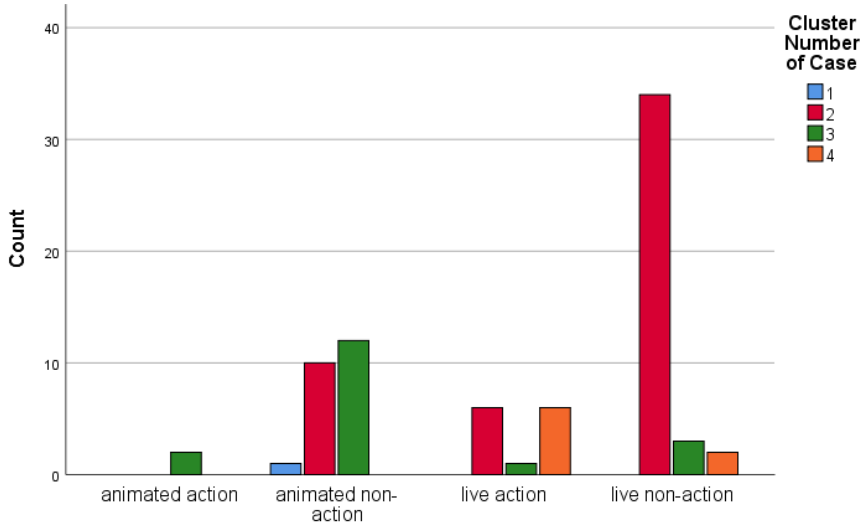
# 2.3.1.a Ward-linkage módszerrel kapott dendogramm



# 2.3.1.b Average-linkage módszerrel kapott dendogramm



## 3.1. Kereszttáblás elemzés




## 4.1.1. Korrelációs mátrix

**Correlation Matrix[a]**

| | | budget | revenue | age | popularity | runtime | vote_average | vote_count |
|---|---|---|---|---|---|---|---|---|
| Correlation | budget | 1,000 | ,700 | -,284 | ,427 | ,214 | -,025 | ,551 |
| | revenue | ,700 | 1,000 | -,162 | ,622 | ,211 | ,187 | ,775 |
| | age | -,284 | -,162 | 1,000 | -,184 | ,134 | ,200 | -,190 |
| | popularity | ,427 | ,622 | -,184 | 1,000 | ,139 | ,270 | ,740 |
| | runtime | ,214 | ,211 | ,134 | ,139 | 1,000 | ,363 | ,226 |
| | vote_average | -,025 | ,187 | ,200 | ,270 | ,363 | 1,000 | ,375 |
| | vote_count | ,551 | ,775 | -,190 | ,740 | ,226 | ,375 | 1,000 |

a. Determinant = ,048

## 4.1.2. KMO és Bartlett teszt

**KMO and Bartlett's Test**

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | ,734 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6521,285 |
| | df | 21 |
| | Sig. | ,000 |

## 4.1.3. Anti-imázs mátrix

**Anti-image Matrices**

| | | budget | revenue | age | popularity | runtime | vote_average | vote_count |
|---|---|---|---|---|---|---|---|---|
| Anti-image Covariance | budget | ,442 | -,175 | ,125 | ,013 | -,126 | ,130 | -,027 |
| | revenue | -,175 | ,283 | -,061 | -,043 | ,000 | ,023 | -,130 |
| | age | ,125 | -,061 | ,828 | ,042 | -,110 | -,144 | ,062 |
| | popularity | ,013 | -,043 | ,042 | ,443 | ,025 | -,018 | -,159 |
| | runtime | -,126 | ,000 | -,110 | ,025 | ,798 | -,234 | -,001 |
| | vote_average | ,130 | ,023 | -,144 | -,018 | -,234 | ,654 | -,136 |
| | vote_count | -,027 | -,130 | ,062 | -,159 | -,001 | -,136 | ,253 |
| Anti-image Correlation | budget | ,735[a] | -,494 | ,207 | ,030 | -,212 | ,242 | -,079 |
| | revenue | -,494 | ,755[a] | -,125 | -,120 | ,000 | ,054 | -,486 |
| | age | ,207 | -,125 | ,630[a] | ,069 | -,136 | -,195 | ,135 |
| | popularity | ,030 | -,120 | ,069 | ,834[a] | ,042 | -,034 | -,474 |
| | runtime | -,212 | ,000 | -,136 | ,042 | ,646[a] | -,324 | -,001 |
| | vote_average | ,242 | ,054 | -,195 | -,034 | -,324 | ,570[a] | -,334 |
| | vote_count | -,079 | -,486 | ,135 | -,474 | -,001 | -,334 | ,738[a] |

a. Measures of Sampling Adequacy(MSA)

## 4.3.1. PCA és PAF kommunalitások (rendre)

**Communalities**

| | Initial | Extraction |
|---|---|---|
| budget | 1,000 | ,651 |
| revenue | 1,000 | ,800 |
| age | 1,000 | ,542 |
| popularity | 1,000 | ,653 |
| runtime | 1,000 | ,474 |
| vote_average | 1,000 | ,678 |
| vote_count | 1,000 | ,832 |

Extraction Method: Principal Component Analysis.

**Communalities**

| | Initial | Extraction |
|---|---|---|
| budget | ,558 | ,549 |
| revenue | ,717 | ,789 |
| age | ,172 | ,180 |
| popularity | ,557 | ,533 |
| runtime | ,202 | ,171 |
| vote_average | ,346 | ,771 |
| vote_count | ,747 | ,838 |

Extraction Method: Principal Axis Factoring.

## 4.3.2. A rotált komponens mátrix (PCA) és a rotált faktor mátrix (PAF) (rendre)

**Rotated Component Matrix[a]**

| | Component 1 | Component 2 |
|---|---|---|
| budget | ,797 | -,129 |
| revenue | ,888 | ,105 |
| age | -,408 | ,613 |
| popularity | ,792 | ,162 |
| runtime | ,211 | ,655 |
| vote_average | ,187 | ,802 |
| vote_count | ,879 | ,243 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 3 iterations.

**Rotated Factor Matrix[a]**

| | Factor 1 | Factor 2 |
|---|---|---|
| budget | ,738 | -,073 |
| revenue | ,875 | ,150 |
| age | -,313 | ,287 |
| popularity | ,690 | ,239 |
| runtime | ,161 | ,381 |
| vote_average | ,076 | ,875 |
| vote_count | ,847 | ,347 |

Extraction Method: Principal Axis Factoring.
Rotation Method: Varimax with Kaiser Normalization.[a]

a. Rotation converged in 3 iterations.

## 4.3.3. PCA és PFA módszerek teljes varianciáját magyarázó táblák (rendre)

**Total Variance Explained**

| Component | Initial Eigenvalues Total | % of Variance | Cumulative % | Extraction Sums of Squared Loadings Total | % of Variance | Cumulative % | Rotation Sums of Squared Loadings Total | % of Variance | Cumulative % |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3,155 | 45,074 | 45,074 | 3,155 | 45,074 | 45,074 | 3,069 | 43,845 | 43,845 |
| 2 | 1,474 | 21,056 | 66,130 | 1,474 | 21,056 | 66,130 | 1,560 | 22,285 | 66,130 |
| 3 | ,821 | 11,729 | 77,859 | | | | | | |
| 4 | ,710 | 10,149 | 88,008 | | | | | | |
| 5 | ,422 | 6,025 | 94,033 | | | | | | |
| 6 | ,252 | 3,594 | 97,627 | | | | | | |
| 7 | ,166 | 2,373 | 100,000 | | | | | | |

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

| Factor | Initial Eigenvalues Total | % of Variance | Cumulative % | Extraction Sums of Squared Loadings Total | % of Variance | Cumulative % | Rotation Sums of Squared Loadings Total | % of Variance | Cumulative % |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3,155 | 45,074 | 45,074 | 2,835 | 40,502 | 40,502 | 2,633 | 37,620 | 37,620 |
| 2 | 1,474 | 21,056 | 66,130 | ,997 | 14,244 | 54,746 | 1,199 | 17,126 | 54,746 |
| 3 | ,821 | 11,729 | 77,859 | | | | | | |
| 4 | ,710 | 10,149 | 88,008 | | | | | | |
| 5 | ,422 | 6,025 | 94,033 | | | | | | |
| 6 | ,252 | 3,594 | 97,627 | | | | | | |
| 7 | ,166 | 2,373 | 100,000 | | | | | | |

Extraction Method: Principal Axis Factoring.

## 5.1. Standardizáltuk a lineáris változókat

**Descriptive Statistics**

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| budget | 2149 | 1 | 380000000 | 38949047,96 | 43253541,11 |
| revenue | 2149 | 5 | 2787965087 | 120873576,7 | 189144147,2 |
| popularity | 2149 | ,0370730000 | 875,5813050 | 28,61171914 | 36,59566046 |
| runtime | 2149 | 63 | 238 | 108,87 | 18,832 |
| vote_average | 2149 | 2,300000000 | 8,500000000 | 6,287947883 | ,8522884765 |
| vote_count | 2149 | 1 | 12002 | 950,17 | 1370,447 |
| age | 2149 | 1,052054795 | 101,1342466 | 15,99604021 | 13,84223797 |
| Valid N (listwise) | 2149 | | | | |

## 5.2 A bent maradt változók szignifikancia alapján

**Variables in the Equation**

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|---|---|---|---|---|---|---|---|
| Step 5[a] | drama(1) | 2,102 | ,492 | 18,228 | 1 | ,000 | 8,182 |
| | Zscore(budget) | -1,455 | ,173 | 70,837 | 1 | ,000 | ,233 |
| | Zscore(revenue) | -,408 | ,155 | 6,922 | 1 | ,009 | ,665 |
| | Zscore(runtime) | 4,452 | ,370 | 145,128 | 1 | ,000 | 85,800 |
| | Zscore(vote_average) | -1,014 | ,166 | 37,439 | 1 | ,000 | ,363 |
| | Constant | 5,923 | ,408 | 210,691 | 1 | ,000 | 373,526 |

a. Variable(s) entered on step 5: Zscore(revenue).

## 5.3 Korrelációs mátrix

**Correlation Matrix**

| | | Constant | drama(1) | Zscore (budget) | Zscore (revenue) | Zscore (runtime) | Zscore (vote_average) |
|---|---|---|---|---|---|---|---|
| Step 1 | Constant | 1,000 | ,034 | -,521 | -,141 | ,931 | -,195 |
| | drama(1) | ,034 | 1,000 | -,040 | -,041 | ,155 | -,243 |
| | Zscore(budget) | -,521 | -,040 | 1,000 | -,549 | -,513 | ,321 |
| | Zscore(revenue) | -,141 | -,041 | -,549 | 1,000 | -,105 | -,282 |
| | Zscore(runtime) | ,931 | ,155 | -,513 | -,105 | 1,000 | -,268 |
| | Zscore(vote_average) | -,195 | -,243 | ,321 | -,282 | -,268 | 1,000 |

## 5.4 Omnibus teszt-együttes szignifikancia

**Omnibus Tests of Model Coefficients**

| | | Chi-square | df | Sig. |
|---|---|---|---|---|
| Step 5 | Step | 7,244 | 1 | ,007 |
| | Block | 623,451 | 5 | ,000 |
| | Model | 623,451 | 5 | ,000 |

## 5.5 Wald tesztnél egyesével is szignifkánsak

**Variables in the Equation**

| | | B | S.E. | Wald | df | Sig. | Exp(B) |
|---|---|---|---|---|---|---|---|
| Step 5[a] | drama(1) | 2,102 | ,492 | 18,228 | 1 | ,000 | 8,182 |
| | Zscore(budget) | -1,455 | ,173 | 70,837 | 1 | ,000 | ,233 |
| | Zscore(revenue) | -,408 | ,155 | 6,922 | 1 | ,009 | ,665 |
| | Zscore(runtime) | 4,452 | ,370 | 145,128 | 1 | ,000 | 85,800 |
| | Zscore(vote_average) | -1,014 | ,166 | 37,439 | 1 | ,000 | ,363 |
| | Constant | 5,923 | ,408 | 210,691 | 1 | ,000 | 373,526 |

a. Variable(s) entered on step 5: Zscore(revenue).

## 5.6 Cox & Snell R2 és Nagelkerke R2

**Model Summary**

| Step | -2 Log likelihood | Cox & Snell R Square | Nagelkerke R Square |
|---|---|---|---|
| 5 | 395,884[a] | ,252 | ,667 |

a. Estimation terminated at iteration number 9 because parameter estimates changed by less than ,001.

## 5.7 Hosmer and Lemeshow teszt

**Hosmer and Lemeshow Test**

| Step | Chi-square | df | Sig. |
|---|---|---|---|
| 5 | 55,718 | 8 | ,000 |

## 5.8 Hosmer and Lemeshow teszt

**Contingency Table for Hosmer and Lemeshow Test**

| | | animation = Animatio | | animation = Live | | |
|---|---|---|---|---|---|---|
| | | Observed | Expected | Observed | Expected | Total |
| Step 5 | 1 | 117 | 114,545 | 98 | 100,455 | 215 |
| | 2 | 13 | 15,604 | 202 | 199,396 | 215 |
| | 3 | 3 | 4,432 | 212 | 210,568 | 215 |
| | 4 | 2 | 1,568 | 213 | 213,432 | 215 |
| | 5 | 0 | ,547 | 215 | 214,453 | 215 |
| | 6 | 1 | ,209 | 214 | 214,791 | 215 |
| | 7 | 0 | ,072 | 215 | 214,928 | 215 |
| | 8 | 1 | ,019 | 214 | 214,981 | 215 |
| | 9 | 0 | ,004 | 215 | 214,996 | 215 |
| | 10 | 0 | ,000 | 214 | 214,000 | 214 |

## 5.9. Roc görbe alatti terület

**Area Under the Curve**

Test Result Variable(s): Predicted probability

| | | Asymptotic Sig.[b] | Asymptotic 95% Confidence Interval | |
|---|---|---|---|---|
| Area | Std. Error[a] | | Lower Bound | Upper Bound |
| ,968 | ,008 | ,000 | ,953 | ,984 |

a. Under the nonparametric assumption

b. Null hypothesis: true area = 0.5

## 6.1.1. Wilks' Lambda csoport átlagra

**Tests of Equality of Group Means**

| | Wilks' Lambda | F | df1 | df2 | Sig. |
|---|---|---|---|---|---|
| drama | ,959 | 90,711 | 1 | 2147 | ,000 |
| Zscore(budget) | ,914 | 201,180 | 1 | 2147 | ,000 |
| Zscore(revenue) | ,929 | 164,054 | 1 | 2147 | ,000 |
| Zscore(runtime) | ,934 | 152,809 | 1 | 2147 | ,000 |
| Zscore(vote_average) | ,997 | 6,700 | 1 | 2147 | ,010 |

### 6.1.2. Normál eloszlás teszt

**Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Zscore(budget) | ,184 | 2149 | ,000 | ,771 | 2149 | ,000 |
| Zscore(revenue) | ,261 | 2149 | ,000 | ,604 | 2149 | ,000 |
| Zscore(runtime) | ,094 | 2149 | ,000 | ,924 | 2149 | ,000 |
| Zscore(vote_average) | ,044 | 2149 | ,000 | ,988 | 2149 | ,000 |
| Zscore(drama) | ,367 | 2149 | ,000 | ,633 | 2149 | ,000 |

### 6.1.3. Normál eloszlás teszt LN értékekkel

**Tests of Normality[a,c,d,e,f]**

| | | Kolmogorov-Smirnov[b] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|---|
| | animation | Statistic | df | Sig. | Statistic | df | Sig. |
| ln_Zbudget | 1 | ,145 | 72 | ,001 | ,919 | 72 | ,000 |
| ln_revenue | 1 | ,106 | 72 | ,042 | ,951 | 72 | ,007 |
| ln_vote_average | 1 | ,210 | 72 | ,000 | ,787 | 72 | ,000 |
| ln_runtime | 1 | ,212 | 72 | ,000 | ,746 | 72 | ,000 |
| ln_drama | 1 | . | 72 | . | . | 72 | . |

### 6.1.4. Box's M teszt

**Box's Test of Equality of Covariance Matrices**

**Log Determinants**

| animation | Rank | Log Determinant |
|---|---|---|
| 0 | 5 | -3,945 |
| 1 | 5 | -3,010 |
| Pooled within-groups | 5 | -2,879 |

The ranks and natural logarithms of determinants printed are those of the group covariance matrices.

**Test Results**

| | | |
|---|---|---|
| Box's M | | 409,318 |
| F | Approx. | 26,928 |
| | df1 | 15 |
| | df2 | 212216,742 |
| | Sig. | ,000 |

Tests null hypothesis of equal population covariance matrices.

### 6.2.1. Vizsgált elemszám

**Analysis Case Processing Summary**

| Unweighted Cases | | N | Percent |
|---|---|---|---|
| Valid | | 2149 | 100,0 |
| Excluded | Missing or out-of-range group codes | 0 | ,0 |
| | At least one missing discriminating variable | 0 | ,0 |
| | Both missing or out-of-range group codes and at least one missing discriminating variable | 0 | ,0 |
| | Total | 0 | ,0 |
| Total | | 2149 | 100,0 |

### 6.2.2. Relatív szórás

**Group Statistics**

| animation | | Mean | Std. Deviation | Valid N (listwise) Unweighted | Valid N (listwise) Weighted | Relíty szórás |
|---|---|---|---|---|---|---|
| 0 | budget | 87455669,365 | 53206531,3956 | 137 | 137,000 | 0,6083828731 |
| | revenue | 313952081,496 | 281376952,4147 | 137 | 137,000 | 0,8962417165 |
| | runtime | 90,270 | 9,1076 | 137 | 137,000 | 0,1008929202 |
| | vote_average | 6,470 | 0,8342 | 137 | 137,000 | 0,1289363817 |
| | drama | 0,066 | 0,2487 | 137 | 137,000 | 3,7850756116 |
| 1 | budget | 35646161,712 | 40443364,5331 | 2012 | 2012,000 | 1,1345783835 |
| | revenue | 107726581,148 | 173625509,5541 | 2012 | 2012,000 | 1,6117239376 |
| | runtime | 110,135 | 18,6552 | 2012 | 2012,000 | 0,1693852403 |
| | vote_average | 6,276 | 0,8523 | 2012 | 2012,000 | 0,135811741 |
| | drama | 0,476 | 0,4995 | 2012 | 2012,000 | 1,0502149925 |
| Total | budget | 38949047,961 | 43253541,1086 | 2149 | 2149,000 | 1,1105160042 |
| | revenue | 120873576,749 | 189144147,2437 | 2149 | 2149,000 | 1,5648097155 |
| | runtime | 108,868 | 18,8318 | 2149 | 2149,000 | 0,1729773511 |
| | vote_average | 6,288 | 0,8523 | 2149 | 2149,000 | 0,1355431839 |
| | drama | 0,450 | 0,4976 | 2149 | 2149,000 | 1,1068910563 |
| | | | | | | szórás / átlag |

### 6.2.3. Kanonikus korreláció

**Eigenvalues**

| Function | Eigenvalue | % of Variance | Cumulative % | Canonical Correlation |
|---|---|---|---|---|
| 1 | ,316[a] | 100,0 | 100,0 | ,490 |

a. First 1 canonical discriminant functions were used in the analysis.

### 6.2.4. Wilks' Lambda

**Wilks' Lambda**

| Test of Function(s) | Wilks' Lambda | Chi-square | df | Sig. |
|---|---|---|---|---|
| 1 | ,760 | 588,658 | 5 | ,000 |

### 6.2.5. Koefficiensek

**Canonical Discriminant Function Coefficients**

| | Function 1 |
|---|---|
| drama | -,242 |
| Zscore(budget) | ,744 |
| Zscore(revenue) | ,186 |
| Zscore(runtime) | -,943 |
| Zscore(vote_average) | ,490 |
| (Constant) | ,109 |

Unstandardized coefficients