**Annexes**

**Annex 1** - List of input features used for model.

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| --- | --- | --- |
| **Feature** | **Description** | **Origin** |
| **nr.products** | Nr. of products presented on each publication. | Source |
| **prod.price** | Price of all products presented on the publication. | Source |
| **nr.days.since.publish** | Nr. of days between the date on which the publication was collected and the date the publication was published. | Source |
| **fb.comments** | Nr. of comments on Josefinas’ Facebook publications | Computed |
| **positive.emoticons** | Represents four types of emoticons (*likes, loves, haha* and *wow*) presented on Josefinas’ Facebook publications | Computed |
| **fb.shares** | Nr. of times the publication was shared on Josefinas’ Facebook English and Portuguese pages | Computed |
| **fb.video.views** | Nr. of times a video was visualized on Josefinas’ Facebook | Computed |
| **price.base** | Price of each product individually and without extra products. When the publication has more than one product, the price base equals the mean of the products’ price. | Source |
| **nr.days.mag.next** | Nr. of days between the date on which a news about Josefinas was published in a magazine (after the publication in social networks has been made) and the date on which the post on was made. | Source |
| **nr.days.evt.next** | Nr. of days between the date on which an event about Josefinas has occurred (after the publication in social networks has been made) and the date on which the post was made. | Source |
| **pi.pins** | Nr. of pins on each publication on Josefinas’ Pinterest. | Source |
| **nr.days.mag.last** | Nr. of days between the date on which the publication was published and date on which a news about Josefinas was published in a magazine (before the publication in social networks has been made). | Source |
| **nr.days.evt.last** | Nr. of days between the date on which the publication was published and date on which an event about Josefinas occurred (before the publication in social networks has been made). | Source |
| **fb.followers** | Nr. of people who follows and likes Josefinas’ Facebook | Computed |
| **tweet** | Identifies if a publication was published on Josefinas’ Twitter or not | Computed |

**Annex 2** - List of collected input features.

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| --- | --- | --- |
| **Feature** | **Description** | **Source** |
| **data.collection** | The date on which the data was collected. | Josefinas’ Facebook  (PT Page) |
| **data.published** | The date on which the data was published. |
| **name** | The name that Josefinas gave to their publications. |
| **fb.en.shares** | Nr. of times the publication was shared. | Josefinas’ Facebook  (EN Page) |
| **fb.en.likes** | Nr. of likes on the publication. |
| **fb.en.loves** | Nr. of “loves” on the publication. |
| **fb.en.haha** | Nr. of “haha” on the publication. |
| **fb.en.wow** | Nr. of “wow” on the publication. |
| **fb.en.comments** | Nr. of “comments” on the publication. |
| **fb.en.video.views** | Nr. of times a video was visualized. |
| **fb.en.followers** | Nr. of people who follows and likes the Facebook page. |
| **fb.en.sad** | Nr. of people who feel “sad” about the publication. |
| **fb.en.angry** | Nr. of people who feel “angry” about the publication. |
| **fb.en.content.type** | The two types of content (photo or video) presented on the publication. |
| **fb.pt.shares** | Nr. of times the publication was shared. | Josefinas’ Facebook  (PT Page) |
| **fb.pt.likes** | Nr. of likes on the publication. |
| **fb.pt.loves** | Nr. of “loves” on the publication. |
| **fb.pt.haha** | Nr. of “haha” on the publication. |
| **fb.pt.wow** | Nr. of “wow” on the publication. |
| **fb.pt.comments** | Nr. of “comments” on the publication. |
| **fb.pt.video.views** | Nr. of times a video was visualized. |
| **fb.pt.followers** | Nr. of people who follows and likes the Facebook page. |
| **fb.pt.sad** | Nr. of people who feel “sad” about the publication. |  |
| **fb.pt.angry** | Nr. of people who feel “angry” about the publication. |  |
| **fb.pt.content.type** | The two types of content (photo or video) presented on the publication. |  |
| **tw.like** | Nr. of likes of each publication. | Josefinas’ Twitter Page |
| **tw.retweet** | Nr. of retweets of each publication. |
| **tw.tweets** | Total number of tweets. |
| **tw.likes** | Total number of likes. |
| **tw.followers** | Total number of followers. |
| **inst.likes** | Total number of likes. | Josefinas’ Instagram Account |
| **inst.posts** | Total number of publications. |
| **inst.followers** | Total number of followers. |
| **inst.views** | Nr. of times a video was visualized on the publication. |
| **inst.comments** | Nr. of comments on the publication. |
| **inst.cnt.type** | The two types of content (photo or video) presented on the publication. |  |
| **nr.products** | Total number of products presented on each publication. | Josefinas’ Website |
| **prod.price** | Price of all the products presented on the publication. |
| **price.base** | Price of each product individually. When the publication has more than one product, the price base equals the mean of the products’ price. |
| **price.extras** | Price of extra products (faux fur or stickers). |
| **prod.type** | Four types of products (shoe, bag, keychain or stickers) presented on each publication. |
| **post.type** | Three types of posts (brand, product or commemoration) presented on each publication. |
| **special.edition** | Identifies if the products on each publication belong to a special edition or not. |
| **pi.global.albuns** | Total number of albums. | Josefinas’ Pinterest Page |
| **pi.global.pins** | Total number of pins. |
| **pi.global.likes** | Total number of likes. |
| **pi.global.followers** | Total number of followers. |
| **pi.comments** | Nr. of comments on the publication. |
| **pi.pins** | Nr. of pins on the publication. |
| **tmb.posted** | Total number of posts. | Josefinas’ Tumblr Page |
| **tmb.reblogged** | Nr. of reblogs on the publication. |
| **tmb.liked** | Nr. of likes on the publication. |
| **gplus.followers** | Total number of followers. | Josefinas’ Google Plus Page |
| **gplus.like** | Nr. of likes on the publication. |
| **gplus.comment** | Nr. of comments on the publication. |
| **gplus.share** | Nr. of times the publication was shared. |
| **event.dt.last.pub** | The date on which an event about Josefinas occurred before the publication date on Josefinas’ social networks. | Josefinas’ Website |
| **magazine.dt.last.pub** | The date on which a news about Josefinas was published in a magazine before the publication date on Josefinas’ social networks. |
| **event.dt.next.pub** | The date on which an event about Josefinas occurred after the publication date on Josefinas’ social networks. |
| **magazine.dt.next.pub** | The date on which a news about Josefinas was published in a magazine after the publication date on Josefinas’ social networks. |
| **nr.days.since.publish** | Nr. of days between the date on which the publication was collected and the date the publication was published. |
| **nr.days.evt.last** | Nr. of days between the date on which the publication was published and date on which a news about Josefinas was published in a magazine (before the publication in social networks has been made). |
| **nr.days.evt.next** | Nr. of days between the date on which an event about Josefinas has occurred (after the publication in social networks has been made) and the date on which the post was made. |
| **nr.days.mag.last** | Nr. of days between the date on which the publication was published and date on which an event about Josefinas occurred (before the publication in social networks has been made). |
| **nr.days.mag.next** | Nr. of days between the date on which a news about Josefinas was published in a magazine (after the publication in social networks has been made) and the date on which the post on was made. |
| **pi.published** | Identifies if a publication was published on Pinterest or not. | Josefinas’ Pinterest Page |
| **gplus.published** | Identifies if a publication was published on Google Plus or not. | Josefinas’ Google Plus Page |

**Annex 3** - Five samples posts information and model evaluation for “Instagram Likes”.

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| --- | --- | --- | --- | --- | --- |
| **Feature** | **Sample 1** | **Sample 2** | **Sample 3** | **Sample 4** | **Sample 5** |
| nr.products | 16 | 4 | 2 | 1 | 1 |
| fb.video.views | 3187 | 4134 | 0 | 0 | 0 |
| fb.shares | 4 | 15 | 1 | 4 | 132 |
| fb.comments | 1 | 6 | 1 | 1 | 161 |
| nr.days.since.publish | 358 | 329 | 125 | 291 | 61 |
| positive.emoticons | 75 | 199 | 67 | 104 | 6176 |
| prod.price | 5120 | 1500 | 2535 | 540 | 295 |
| nr.days.mag.next | 31 | 1 | 3 | 82 | 12 |
| price.base | 320 | 375 | 1267,5 | 540 | 295 |
| nr.days.evt.next | 16 | 104 | 27 | 65 | 27 |
| pi.pins | 0 | 0 | 2 | 5 | 3 |
| nr.days.mag.last | 1 | 31 | 11 | 3 | 33 |
| nr.days.evt.last | 59 | 14 | 39 | 53 | 3 |
| fb.followers | 115648 | 116133 | 116947 | 116278 | 131505 |
| tweet | no | no | yes | yes | yes |
| **Real** | 102 | 103 | 284 | 184 | 1400 |
| **Predicted** | 125.049 | 126.039 | 260.921 | 206.992 | 571.487 |
| **Absolute difference** | 23.049 | 23.039 | 23.079 | 22.992 | 828.513 |
| **% difference** | 23% | 22% | 8% | 12% | 59% |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Full  Data Collected |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |
|  |
|  |  |
|  |  |
|  |  |  |  |  |  |  |  |  |
| Posts |  | 588 | 519 | 556 | 469 | 232 | 168 |  | 20 |

**Annex 4** - Publications collected initially from each social network.



**Annex 5** - Snapshot of Josefinas’ Instagram.



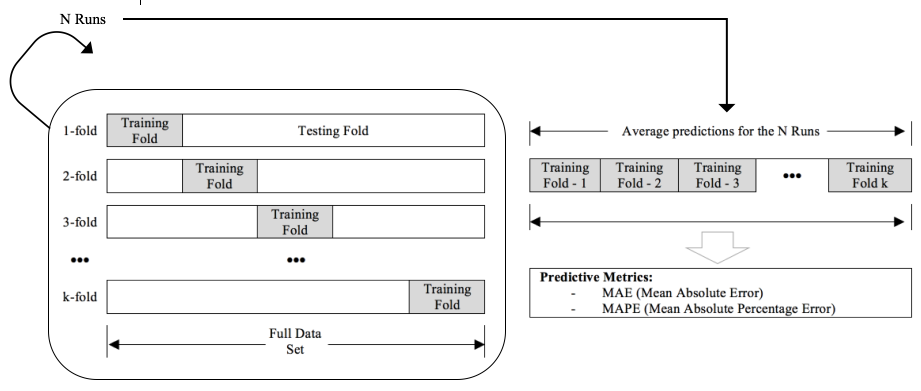
**Annex 6** - Snapshot of an Instagram post.



**Annex 7** - Snapshot of Josefinas’ Facebook.



**Annex 8** - Snapshot of a Facebook post.



**Annex 9** - Modeling performance assessment.