Draft of metrics For evaluating Animation data Management

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Draft of metrics
For evaluating
Animation data
Management
This document provides detailed metrics for the evaluation of animation data management system.

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Contents
- Weight of metrics
- Metrics
Weight of metrics

This is where you enter your weighting factor of 0 to 4 for each metric. This should reflect the importance of the feature to you. Typical weighting factor definitions are:

<table>
<thead>
<tr>
<th>Weighting Factor</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not Important (Select 0 or ignore if the feature is not a requirement)</td>
</tr>
<tr>
<td>1</td>
<td>Has some Significance (Select 1 if the feature is not important but may have some use)</td>
</tr>
<tr>
<td>2</td>
<td>Significant (Select 2 if the feature is one that you want but upon which you could possibly compromise)</td>
</tr>
<tr>
<td>3</td>
<td>Highly Significant (Select 3 if the feature is one that you would not like to be without)</td>
</tr>
<tr>
<td>4</td>
<td>Absolute or mandatory requirement (Select 4 if the feature is an absolute necessity for which there is no compromise)</td>
</tr>
</tbody>
</table>

Metrics

1. System Requirements

1.1 Operating System (Windows, Mac etc.)

You may have a requirement for a particular operating system.

1.2 Database format (SQL, Oracle, etc.)

You may have a requirement for a particular database system.

1.3 Mobile devices support/Web and mobile compatible

The use of devices that support remote is much more common as this technology is improved. Consider whether you will be using mobile devices and ensure that the system is capable of supporting your needs.

1.4 Single or multi-site functionality

Must the application support multi-site operation or are you on a single site?

1.5 Regulatory compliance support

In your industry are there any statutory standards to which the software must comply? For example if you are an ISO9000 organisation does the software comply with this?

1.6 Ease of implementation

You should consider the work required to implement the system. Is it simply a case of installing it on a server on your network and mapping drives to it? Or, does it require lots of expensive, on site consultancy?

1.7 Additional software required

Some applications require that licences are purchased for additional database software such as SQL server. You should ensure that you clarify any requirement for this.

1.8 System maintenance

You should consider how much maintenance is required by the system. For example, are manual database backup and archiving processes required?

1.9 Speed

The system should conform to your requirements with regard to speed of access and response time. It should also comply with your volume transaction handling requirements

1.10 Alternative Languages

Score the package for its support of alternative languages if this is a requirement.

1.11 Interoperability/Integration

Your system should meet your requirements with respect to its handling of links and hyperlinks to external records and information. For example, do you need it to be able to link to documents or data within other external systems?

Out-of-the-box integration with tools artists use every day – Nuke, Maya, Photoshop, Houdini, etc

1.12 Scalability

Open APIs

1.13 Required number of concurrent users
Does the application support the required number of users? Concurrent users are users that are logged on to the system at the same time. You may also want to ensure that your licence agreement allows you to install the software on any number of PCs. Multi-user licences often allow this.

1.13 Globalization/ localization support

2. Asset management

2.1 Data import or export requirements

You should consider how important it is for you export or import data in the application. For example, you may want to export data to Microsoft Office applications for statistical purposes if the application is weak on reports. Also, during implementation you may find that some applications are capable of importing data from other sources. This is more important during an upgrade to a new system than in a first time implementation.

2.2 Archiving requirements.

You may have a requirement to archive your data. You should ensure that the system is capable of this.

2.3 Graphical, hierarchical data structure

Data management systems which display a graphical representation of a hierarchical structure (parent/child relationships) are generally preferred. These make data analysis / searching easier.

2.4 Filtering and searching friendliness

When searching for asset on the system you should ensure that it meets your requirements for ease of use. There should be several optional ways of finding data that the users will need. How easy is it to find specific data such as a particular category? Support Operators (e.g., in, and, or), Expression Searching

2.5 Retrieval approaches

Text-based, content-based, semantic-based
Keyword Search, sample-based Search, sketch-based Search

2.6 Evaluation of retrieval sets

How is system effectiveness measured? The two most frequent and basic measures for information retrieval effectiveness are precision and recall. Both precision and recall are therefore based on an understanding and measure of relevance.

Precision (P, also called positive predictive value) is the fraction of retrieved documents that are relevant to the query

\[
Precision = \frac{\#(relevant \ items \ retrieved)}{\#(retrieved \ items)} = P(relevant|retrieved)
\]

Recall (R, also known as sensitivity) is the fraction of relevant documents that are retrieved to the query that are successfully retrieved.

\[
Recall = \frac{\#(relevant \ items \ retrieved)}{\#(relevant \ items)} = P(retrieved|relevant)
\]

2.7 Access to data from various areas

System users may require to log on and input or to check data from any work station that has the application installed.

2.8 Check-in/check out

2.9 Version control

2.10 Dynamic visualisation

Animation Data 3D visualisation, Review (e.g., 3D model: zoom in/out, rotation), animation data file information statistics (e.g., 3D model: number of faces)

3 Interfaces / Usability

3.1 The look and feel of the application/Intuitive interfaces require little training

Do you have strict requirements for the system to follow standard windows processes and procedures? Is it important to you that it does?

3.2 Look ups
Look ups are tables or drop down lists that offer you a selection of data to choose from when using the system. It should maximise the use of these so that free text entry is limited. All data inputs should offer users a list where possible.

3.3 Customization/User configurability of look ups and lists
You may want to consider customisable screens that allow the administrator to hide specific fields from defined users. It is used to simplify the screens for certain users, hiding those fields that they do not use.

3.5 Overall ease of use
Taking all things into consideration you should score each package for its ease of use (e.g., Tasks completed within 3 clicks).

4 Workflow/pipeline

4.1 Plan
Plan your crew and schedule people to projects and milestones so you always know who’s booked, free, or out

4.2 Tasks and Schedules
Schedule the details about who’s doing what, when. Tasks are attached to shots and assets, and then tracked. Managers view a chart of all tasks, artists just see their own.

4.3 Track
Track film shots and assets, game levels, software project tickets – whatever you’re building, and their status. Customize easily with templates.

4.4 Notes and Communication
Fast, fluid note-taking that keeps communications out of email and tied to tasks. A separate Inbox allows artists to see activity on all the things that are important to their work.

4.5 Workflow/pipeline visualisation
Provide a clear understanding of the whole processing.

5. Security and Authentication

5.1 Ease of use
Administration of the security features can be very complex. You should ensure that your application has a useable administration module and that you have the IT structure to support this.

5.2 Tabular selection
Many security modules offer a table of functions for which permissions can be granted to each user or group. This is normally done by checking or ticking the relevant permissions boxes for each user or group. Score the application’s usability here.

5.3 Simple login process
This is a small but important point. Login should be achieved quickly and effortlessly.

5.4 Password
Users should be allocated passwords. This need not necessarily be done on an individual basis. For example it may be enough for all people doing the same job and in the same section to have the same password.

5.5 Individuals and group settings
You should be able to set up individual users ID’s as well as user groups. This allows users who require the same access level to be placed in the same group.

5.6 Audit trail
You may require an admin audit trail that would provide traceability to individuals for all changes to the administration and security module.

5.7 Customisation
Application customisation should be easy for the administrator. For example configuration of screens and user configurable data should be intuitive and not requiring a high level of IT knowledge.

6. Analysis & Reports
6.1 Analysis
Data analysis
Production efficiency analysis
Finical analysis

6.2 Data export capability
Many systems provide a data export facility. For example they may allow you to export data to MS Excel.

6.3 Customisable reports
Customisable reports allow the user to modify existing reports and save them as additional reports.

6.4 Format of reports (graphical/text)
What functionality does the application have with respect to its handling of report output? Does it allow data to be displayed graphically?