



DevTreks –social budgeting that improves lives and livelihoods

## **Story Telling**

**Last Updated: August 06, 2018; First Released: April 12, 2013**

**Author: Kevin Boyle, President, DevTreks (1\*)**

**Version: 2.1.4**

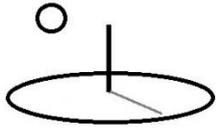
### **A. Introduction**

All base element content in DevTreks should be linked to multimedia, explanatory stories, and metadata (author, summary). Farm machinery input data sets should be linked to pictures of the farm equipment. Crop operations should be linked to videos, or pictures, of the production stages. Monitoring and evaluation analyses should be linked to stories explaining the progress being achieved in a project or program.

Stories are completed using the following four steps (2\*).

#### **1. Manage Multimedia**

Multimedia is stored in a Resources service using a four level hierarchy. The first level is a Service, the second is a Resource Group, the third is a Resource Pack, and the fourth level is the Resource. The multimedia itself is uploaded into the fourth level, or Resource level. Multimedia content can consist of images, videos, documents, style sheets, and a variety of other data formats. DevTreks imposes a size limit (i.e. 60 MB), explained in the Social Budgeting reference, on any individual multimedia file. A typical hierarchy appears as follows:



DevTreks –social budgeting that improves lives and livelihoods

HomeTreks Edit	Search Pack	Preview Views	Select Club
-------------------	----------------	------------------	----------------

Preview

Edit

M and E Stories

M and E Malnutrition Project 1, Page 1

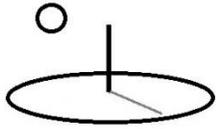
Project 1 supports a DevTreks tutorial introducing monitoring and evaluation analysis. (< [preview IRI](#))

M and E Malnutrition Project 1, Page 2

Project 1 supports a DevTreks tutorial introducing monitoring and evaluation analysis. (< [preview IRI](#))

Search IRIs:

<http://localhost:57793/hometreks/select/smallholders/resourcegroup/M and E Stories/147/none>



**M and E Malnutrition Project 1, Page 1**

---

**Image 01, M and E Calculator 1**  
This image shows the properties of M and E calculators. (< [preview IRI](#))

---

**Image 02, M and E Calculator 1**  
This image shows the results of running a typical M and E calculator. (< [preview IRI](#))

---

**Image 03, ME Results**  
Sample ME analysis results. (< [preview IRI](#))

---

**PDF 01, Monitoring and Evaluation Analysis 1**  
This pdf file demonstrates how to complete a full monitoring and evaluation analysis. (< [preview IRI](#))

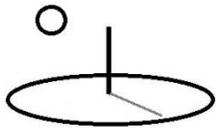
---

**Video 01, M and E Introduction**  
This video introduces monitoring and evaluation frameworks. (< [preview IRI](#))

---

**Search IRIs:**  
`http://localhost:57793/hometreks/select/smallholders/resourcepack/M and E Malnutrition Project 1, Page 1/497/none`

Resource Packs can be linked to individual pages in a story, or separate calculators and analyzers. The Resources in a Resource Pack support the requirements of the story, calculator, or analyzer. In almost all instances, at least one of the resources will be a style sheet that can convert the story, calculator, or analyzer, into HTML. In other instances, Resources might be images used to illustrate a story, data lists that are used in calculators, or videos used as stand-alone tutorials. A typical resource appears as follows:



PDF 01, Monitoring and Evaluation Analysis 1

PDF 01, Monitoring and Evaluation Analysis 1

D U

Click button to download resource.

Download MandE-Analysis01b.pdf

**Label**  **Tag Name**

**Last Changed**

**Description**

**Long Description**

**Mimetype**

**GeneralType**

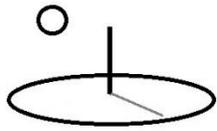
**FileName**

Show File Upload

Edit Linked Views Views

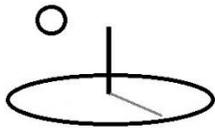
+ Video 01, M and E Introduction

The following image demonstrates that all calculators and analyzers include a MediaURL property which allows Resources to be tied directly to calculators and analyzers. When a URL to a Resource is added to the MediaURL property, the Media view, found on the Views panel for all calculators and Analyzers, will display the multimedia. This view is convenient for displaying



DevTreks –social budgeting that improves lives and livelihoods

graphics or tables that highlight the most important points contained in raw calculated results. It also offers a convenient alternative to building complete stories –the displayed image can be a simple list of URLs to further explanatory media. Further information about this property can be found in the Calculators and Analyzers tutorial.



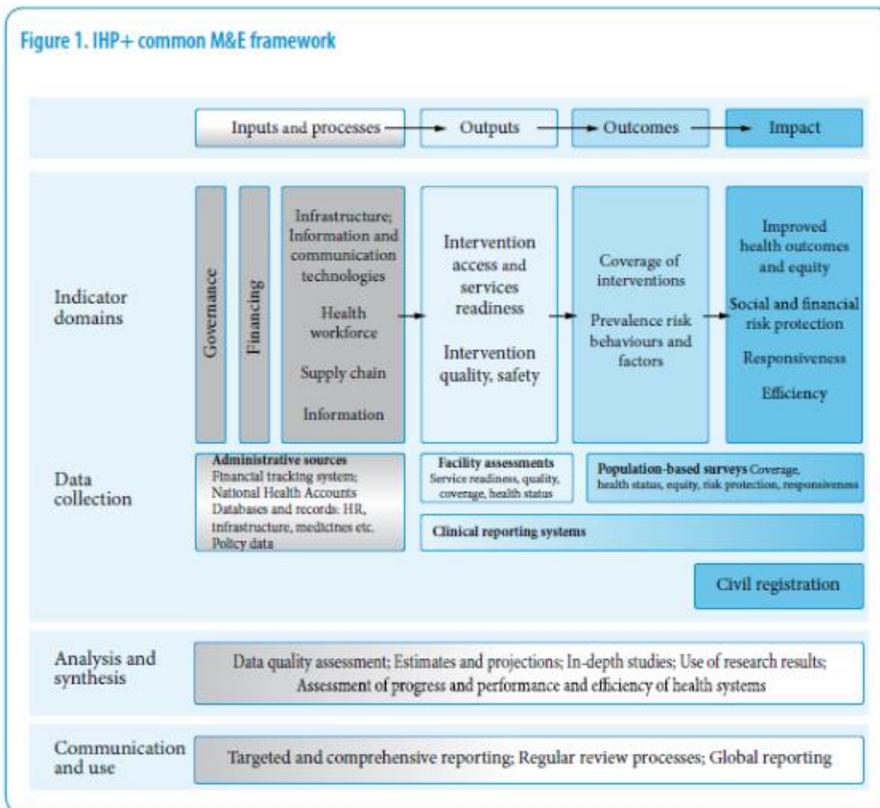
DevTreks –social budgeting that improves lives and livelihoods

HomeTreks	Search	Preview	Select
Edit	Pack	Views	Club

Media
  Mobile
  Desktop

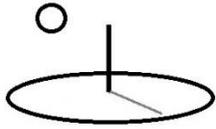
Dataset: [ME2 Project 01 IRI](#) ME 2 Tests.

WHOHealthMandE



4.1 There is a balanced and parsimonious set of core indicators with well-defined baselines and targets

## 2. Build Stories



Stories are built and edited using an interactive paragraph editor. Stories are stored in a Linked Views service using a five level hierarchy. The first level is a Service, the second is a Linked View Group, the third is a Linked View Pack, the fourth level is a Linked View, and the fifth level is a Resource Pack. The story itself, which will be a blank xml story to begin with, is uploaded into the fourth level, or Linked View level. This is the same workflow used to build calculators and analyzers. A typical hierarchy appears as follows:

HomeTreks	Search	Preview	Select
Edit	Pack	Views	Club

← Preview Edit →

↑ M and E Calculators, Analyzers, and Stories

■ M and E 1 Analyzers

↓ These analyzers measure the progress achieved in meetin monitoring and evaluation indicator targets. The indicators ca...

■ M and E 2 Analyzers

↓ These analyzers measure the progress achieved in meetin monitoring and evaluation indicator targets. The indicators ca...

■ M and E Calculators

↓ These calculators add monitoring and evaluation indicators to inputs, outputs, operations, components, outoomes, opera...

■ M and E Malnutrition Stories

↓ These stories explain the monitoring and evaluation results for malnutrition improvement projects and programs. (< [pre...](#)

**Search IRIs:**  
<http://localhost:57793/hometreks/select/smallholders/servicebase/M and E Calculators, Analyzers, and Stories/2651/none>



DevTreks –social budgeting that improves lives and livelihoods

The screenshot shows a web interface with a header bar containing a search icon and the text "M and E Malnutrition Stories". Below this, there are two main entries:

- M and E Malnutrition Tutorial 1**: This entry includes a small square icon, a downward arrow icon, and a text description: "This story is used with a DevTreks tutorial to explain how the new monitoring and evaluation framework works. (< [previ...](#))".
- Metadata Tutorial 1**: This entry includes a small square icon, a downward arrow icon, and a text description: "This metadata document is used with a DevTreks tutorial to explain how metadata works. (< [preview IRI](#))".

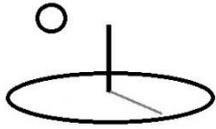
At the bottom of the screenshot, there is a section titled "Search IRIs:" with the following URL: `http://localhost:57793/hometreks/select/smallholders/linkedviewgroup/M and E Malnutrition Stories/51/none`

The initial, blank, xml story is used to store the full content of the story. An initial, blank, story (Story1.xml) can be obtained at:

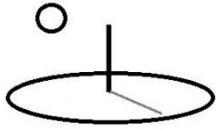
<https://www.devtreks.org/agtreks/preview/crops/resourcegroup/Story Support Group/60/none/>

The fifth level, or Resource Pack, contains the style sheet needed to display and edit the story, as well as any multimedia needed to support the story. These Resource Packs are selected by using the standard “Select and Search” work flow used throughout DevTreks and explained in the Calculators and Analyzers tutorial. The default xml story’s stylesheet (Stylesheet1.xslt) can be found as a sibling Resource Pack in this Resource Group.

Stories can be opened for editing by 1) Search for Linked Views and open the Linked View holding the story in the Preview panel, 2) Use the “Views” command buttons on the Preview panel to open the story in the standard Linked Views panel, 3) Use the “Open in Edits Panel” command button shown in the following image to open the Story in the Edits panel for editing.



The screenshot shows a web browser window with the address bar displaying "Secure | https://www.devtreks.org/ho...". The navigation menu includes "HomeTreks", "Search", "Preview", and "Select". Below the menu, there are buttons for "Edit", "Pack", "Views", and "Club". The "Views" button is highlighted. Below the navigation, there is a "Select" button with a left arrow. A dropdown menu shows "A- Introduction to Malnut" with a "Get" button. Below that, another dropdown shows "no linked addins available". There is also a button "Open in Edits Panel." with a left arrow. The main content area features a heading: "Monitoring and Evaluation Analysis 1 (Last Updated: August 06, 2018): Author- Kevin Boyle, President, DevTreks". Below the heading, there is a paragraph of text: "This reference demonstrates how DevTreks can be used to monitor and evaluate projects and programs." A section header "A. Introduction" is followed by another paragraph: "This example combines DevTreks' standard economic evaluation framework (i.e. budgets) with a new monitoring and evaluation (ME) framework. The DevTreks reference, Monitoring and Evaluation 1: Food Nutrition introduces the background logic for ME analysis in DevTreks. This reference documents how to complete a full ME analysis using new ME calculators and analyzers. DevTreks treats the monitoring and evaluation of projects and programs as a type of Capital Program (see GAO, 2009) that requires the use of 'best practices' for managing data to achieve cost effective results." Below the text, there is a "Video:" label and a video player area with a play button icon.



DevTreks –social budgeting that improves lives and livelihoods

Stories are edited by adding new paragraphs, also known as Content Nodes, to the initial blank xml document and then adding multimedia, data lists, or HTML links, to each paragraph. The following image displays the story editing interface.

**Submit** **Cancel** **Close**

A- Introduction to Malnut

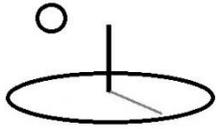
Title:

Name:

Sort Label:

Date Last Modified:

Description:



DevTreks –social budgeting that improves lives and livelihoods

**Add Content Node** 

Number to add

---

**Content For Story**

Title:

Name:

**Del** **UnDel**

Sort Label:

Description

This example combines DevTreks' standard economic evaluation framework (i.e. budgets) with a new monitoring and evaluation (ME) framework. The DevTreks reference, Monitoring and Evaluation 1: Food Nutrition introduces the background logic for ME analysis in DevTreks. This reference documents how to complete a full ME analysis using new ME calculators and analyzers. DevTreks treats the monitoring and evaluation of projects and programs as a type of Capital Program (see GAO, 2009) that requires the use of "best practices" for managing data to achieve cost effective results.

**Add Media Node**  **Add Link Node**  **Add List Node** 

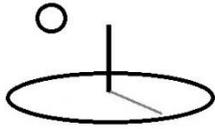
Number to add

---

**Content For Story**

Title:

The following interface demonstrates that multimedia content is linked to stories by adding the name of the multimedia (found in a child Resource Pack) to a File Name property in a Media Node:



**Content For Story**

Title:

none

Name:

none

Del UnDel

Sort Label:

g

Description

Version 1.3 uses one consistent set of properties for all indicators. These properties are defined in the DevTreks reference, Monitoring and Evaluation 1: Food Nutrition. Each ME element can include up to 20 indicators that define Benchmark, Full Target, Partial Target, and Actual amounts.

The following image displays a typical indicator's properties:

Add Media Node + Add Link Node + Add List Node +

Number to add

0

**Media For Story**

Name:

Image 1- Step 1 of Typical Indicator Calculator

Del UnDel

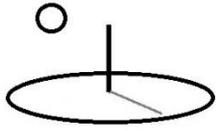
Sort Label:

a

File Name:

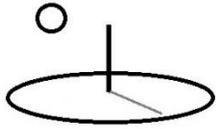
InputCalclnd2.PNG

Long Description



DevTreks –social budgeting that improves lives and livelihoods

This version of DevTreks contains one type of story and one style for displaying the story. If more sophisticated stories are needed, put the story (i.e. pdf file) in one of the Resource Packs linked to the story, and use the story’s multimedia links to provide access to the files. The following image displays how the links appear. DevTreks may provide custom story telling as a fee-based service. For example, a scientific organization may prefer to use the ISO xml schema for scientific articles instead of the default DevTreks xml schema.



HomeTreks	Search	Preview	Select
Edit	Pack	Views	Club

← Select

C- Malnutrition Project 1

no linked addins available

← Open in Edits Panel.

### Malnutrition Project 1: Content and Links

This page displays the data structures used with each M and E element, It also provides links to each M and E element's calculations and analyses.

#### F. Inputs

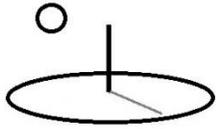
The following lists include the WBS that was used to classify inputs. The URIs link to the calculations and analysis.

1. **Type- T120:** Food Nutrition
2. **Group- IG120:** M and E Malnutrition Education Group
3. **Input- I120:** 2013 Nutrition Training Manual Development
4. **Input Series I120:** 2013 Nutrition Training Manual Development
5. **Indicator 1- I120:** Training Material Development Labor
6. **Input- I121:** 2013 Nutrition Training Workshop
7. **Input Series I121:** 2013 Nutrition Training Workshop
8. **Indicator 1- I121:** Training Labor

<a href="#">Input ME Service URI</a>
<a href="#">Input ME Calculator URI</a>
<a href="#">Input ME Analyzer URI</a>

### 3. Link Stories to Base Element Content

Stories can be linked to any base element content in DevTreks by using the standard “Linked Views” interface explained in the Calculators and Analyzers tutorial. This interface allows any type of Linked View to be linked to any base element. Linked views can be calculators, analyzers, and stories. The interface appears as follows:



HomeTreks	Search	Preview	Select
Edit	Pack	Views	Club

**Linked Views**

Linked View Id : 177

Is Default

Linked View Id : 178

Is Default

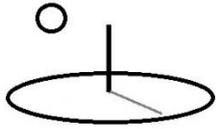
Linked View Id : 179

Is Default

Linked View Id : 201

Is Default

Stories can be opened from economic content by loading the content in the Views panel. The Views panel will put all stories into one drop down list at the top of the panel, and all calculators and analyzers into a separate drop down list. The following image displays the two drop down



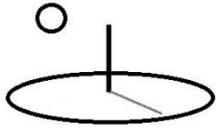
DevTreks –social budgeting that improves lives and livelihoods

lists. The two lists can be kept synchronized by making selections from both lists at the same time; otherwise they act independently.

#### **4. Complete Metadata (Optional)**

Metadata is data that describes other data. DevTreks uses 15 metadata elements recommended by the Dublin Core metadata initiative. These elements include: Title, Creator, Subject, Description, Publisher, Contributor, Date, Type, Format, Identifier, Source, Language, Relation, Coverage, and Rights. An Internet search of the term “Dublin Core Metadata” will link to a site that describes each of these elements.

Each metadata element can be completed in DevTreks using Steps 2 and 3, but instead of filling out a blank “Story1.xml” document, a blank “Meta1.xml” document is filled out. The metadata document and stylesheet can be found as part of a Metadata Resource Pack (use the search term, metadata). The metadata describes both the story and the raw data results (**3\***).



The following image shows what a metadata document looks like.

HomeTreks	Search	Preview	Select
Edit	Pack	Views	Club

[← Select](#)

Metadata Tutorial 1----- [Get](#)

no linked addins available \_\_\_\_\_ [▼](#)

[← Open in Edits Panel.](#)

**Title**

This is a title. Version 200a

**Creator**

This is a creator. Version 200a

**Subject**

This is a subject. Test 3.

**Description**

This is a description. Version 200a

**Publisher**

This is a publisher. Version 200a

**Contributor**

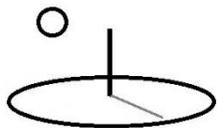
This is a contributor. Version 200a

**Date**

This is a date. Version 200a

**Type**

## Summary



DevTreks –social budgeting that improves lives and livelihoods

Clubs using DevTreks can easily link multimedia and stories to all base element content. All content can be described using metadata documents. Multimedia and stories can help people use social budgeting content to reach decisions that help them to improve their lives and livelihoods.

## Footnotes

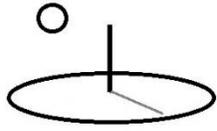
1. DevTreks is a small ngo that cannot afford to, and does not, host Internet content for free. Our current business plan, involving subscription-based software services or strictly educational DevTreks tutorials, is explained in the Deployment tutorial. That tutorial also explains that Version 2.0.0 is underwent a major software refactor.
2. This story telling application is admittedly “different” than most on line story editing applications. However, it employs the standard workflows used throughout DevTreks to build content. The 4 step process used to complete a story, while more burdensome than some alternative applications, should not be a major barrier to people with a serious interest in building social budgeting content. If it is, use the alternative shortcut mentioned in Step 1 –add a MediaURL that lists relevant links to further explanatory content. This story telling application will evolve in future releases (i.e. by adding a default “Add Story” button to the standard Linked Views user interface).
3. The content shown in this image reflects DevTreks software development, rather than content development, role. The fact that 2 bugs were discovered during the Version 2.0.0 refactor reflects DevTreks status as a small, imperfect, ngo.

## References

No references were used with this tutorial

## Improvements, Errors, and New Features

Please notify DevTreks ([devtrekkers@gmail.com](mailto:devtrekkers@gmail.com)) if you find errors or can recommend improvements.



DevTreks –social budgeting that improves lives and livelihoods

**A video tutorial explaining this reference can be found at:**

<https://www.devtreks.org/commontreks/preview/commons/resourcepack/Story Telling 1 Tutorial/491/none/>