

# How to budget for “ICT in Education”



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# Foundation of GESCI



- GESCI was founded by the **UN ICT Taskforce** in 2003, and began operations in 2005 working initially with Namibia, Ghana, India, Bolivia and later Rwanda
- **African Leadership in ICT (ALICT) programme** started in 2010 and operational across 16 African countries covering Eastern, Southern, West and North African countries as well as AUC staff members
- **African Knowledge Exchange (AKE)** – Eastern and Southern Africa
- **SIPSE** programme in Kenya and Tanzania (pilot concluded)
- **ADSI** programme in Kenya, Tanzania and Cote d'Ivoire
- Leadership Network for Sustainable Development
- GESCI operates at country, regional and global levels

# Contents of this session

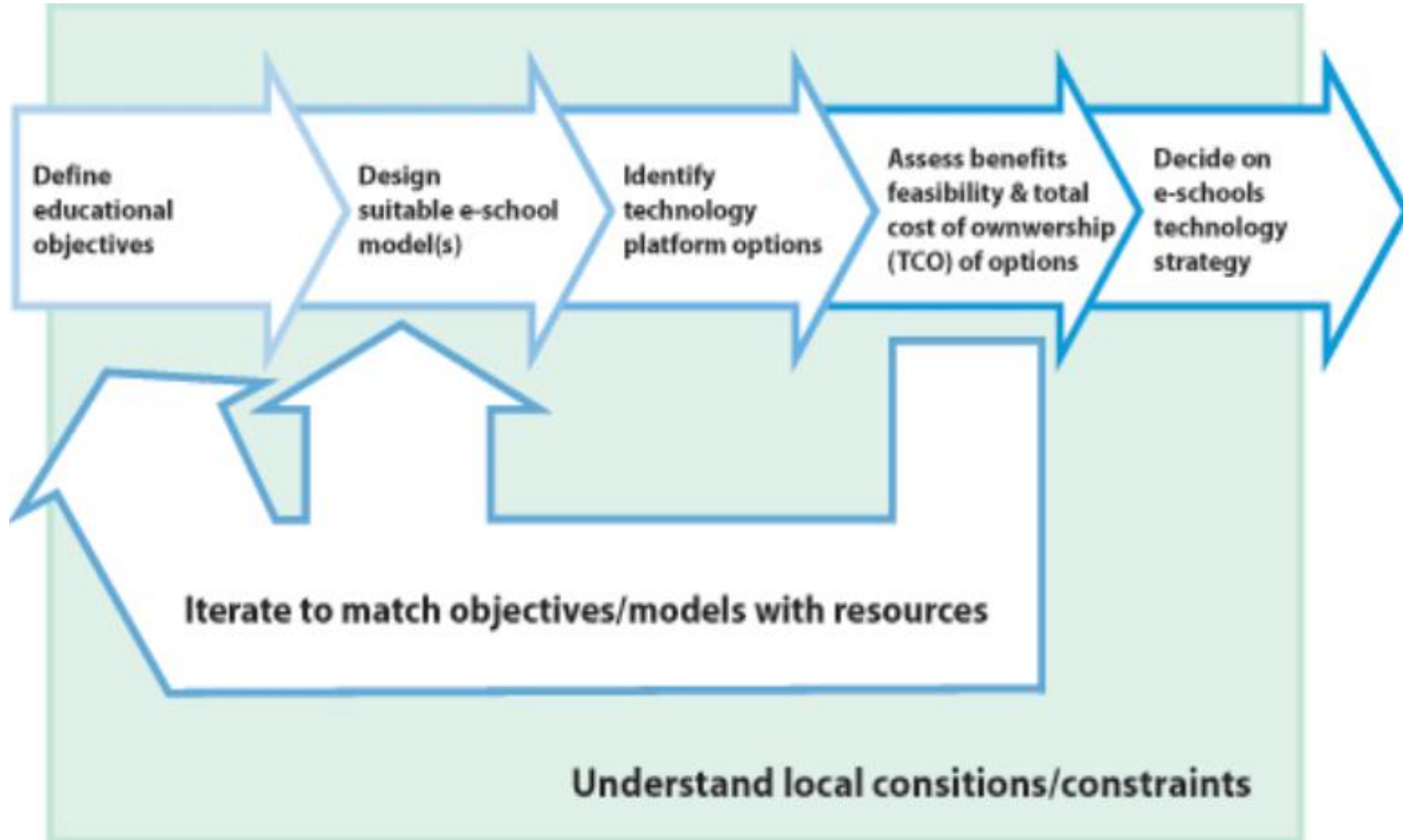
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- **ICT in Education – Basics for Budgeting**
- **ICT in Education – Framework**
- **Rationale for using - Total Cost of Ownership (TCO) tool**
- **Cost pattern for ICT in Education Projects**
- **TCO case studies: ICT in Education models**

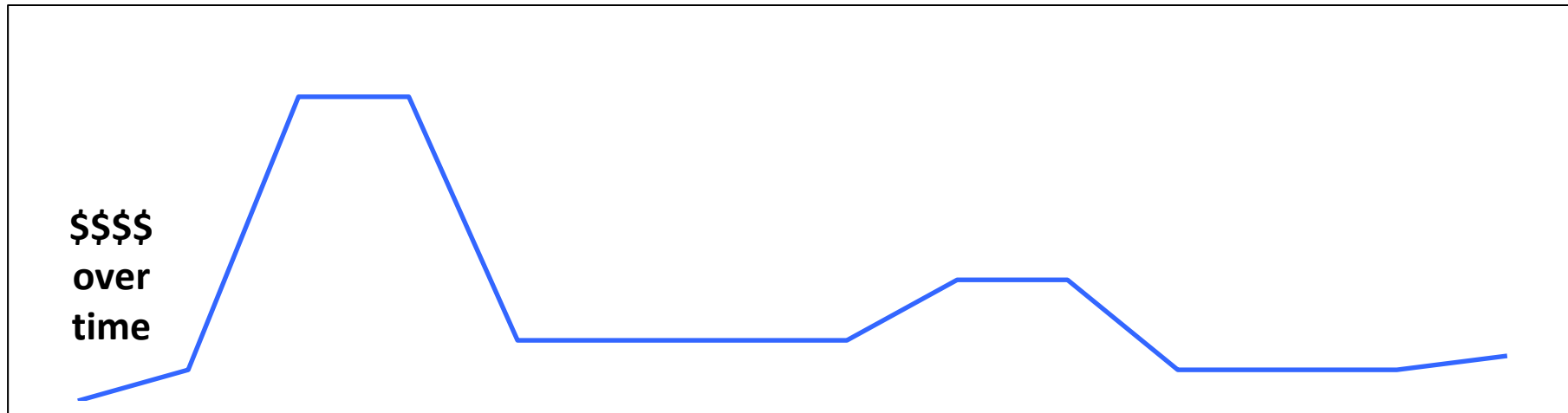
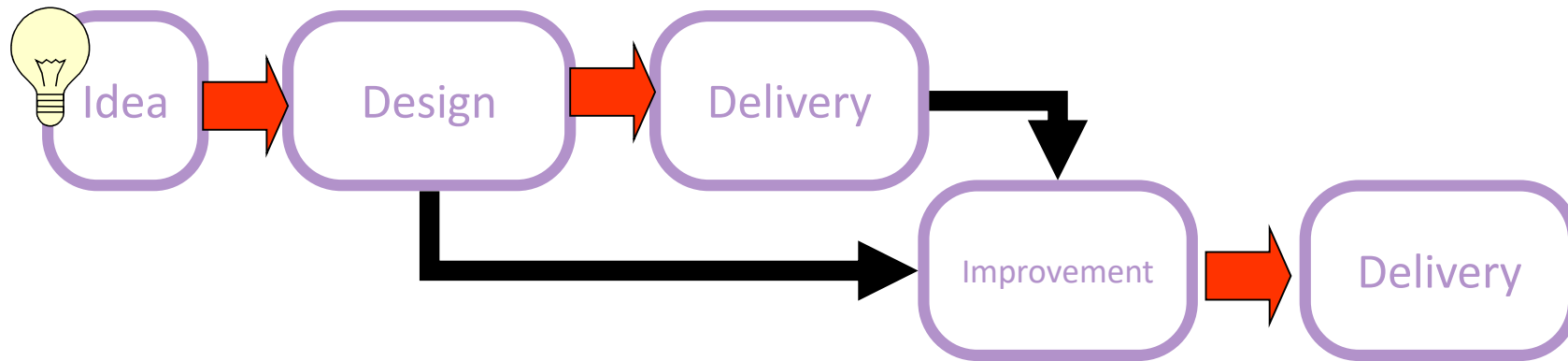
# ICT in Education – Basics for budgeting

- Focus on education objectives - **what you want to do with ICTs?**
- Consider all the elements of the system deep - wide approach. **ICT in Education does not equate to computers or hardware and software only!**
- Consider short term as well as long term costs or the Total Cost of Ownership (TCO). **The GESCI TCO Tool is an option to use to analyse**

# Framework for Selection ICT in Education



# ICT in Education - lifetime cycle



# Rationale for using Total Cost of Ownership (TCO)

- **Considers the user's school context**
- **Provides the user with different technology and system-wide component options**
- **Considers the implementation plan that the school might take**
- **Allows the user to determine the device lifecycle**
- **Allows for inflation and discounting**
- **Allows the user to change their choices**
- **Allows the user to input additional or unique ICT options**

# Key components for estimating TCO

- **Physical Infrastructure: Building, Electricity, Air conditioners, Furniture, Security**
- **ICT infrastructure: Access Devices, OS and licensing scheme, Server and its OS, Peripheral devices, Display devices, networking, Insurance, Consumables**
- **Content and its applications: Usage approach, Licensing scheme, Educational applications, School administration applications**
- **Training and support: One time and ongoing professional development and support**
- **Maintenance and technical support**
- **Monitoring and Evaluation**



# TCO Tool Contents

**Step 0: Assumptions** contain basic project parameters used for all the calculations, like the number of schools, teachers and students.

**Step 1: Central Costs** contain the costing elements related to the central planning and management of the project, both initial and ongoing

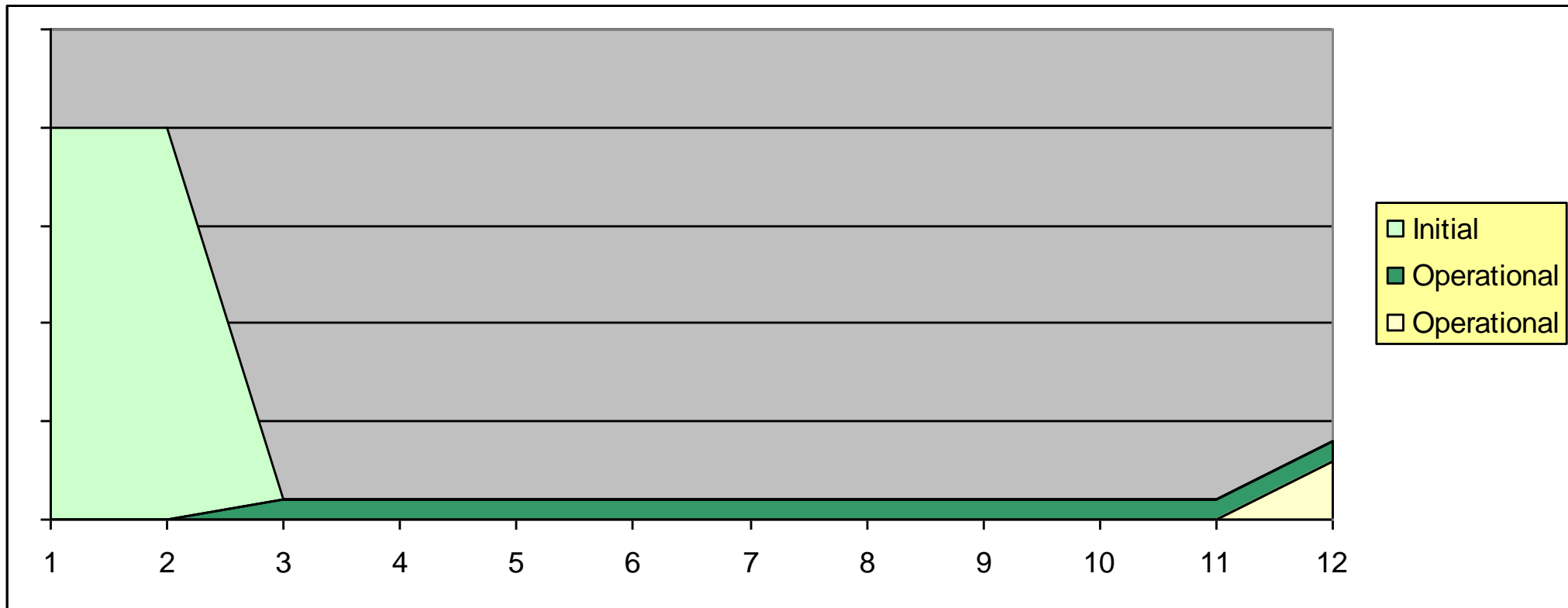
**Step 2: All schools - initial costs** include all initial (one time) costs for the deployment to all schools.

**Step 3: All schools - running costs** include all regular costs related to the execution, ongoing training, maintenance and monitoring of the project in all schools



# Initial + operational costs

One time / Initial set up cost and recurrent / operational costs – Pattern



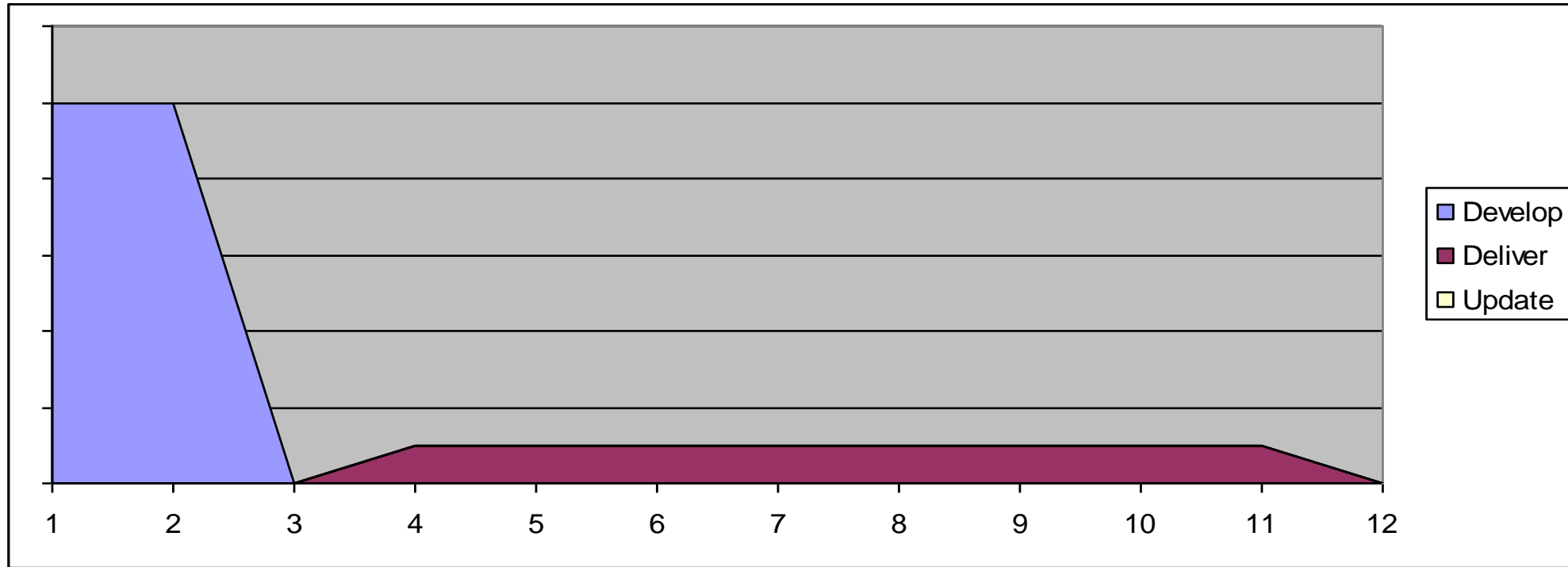
# TCO case studies

Few case studies of ICT in Education budget pattern for one time / capital investment and recurring / operational costs

## ICT in Education:

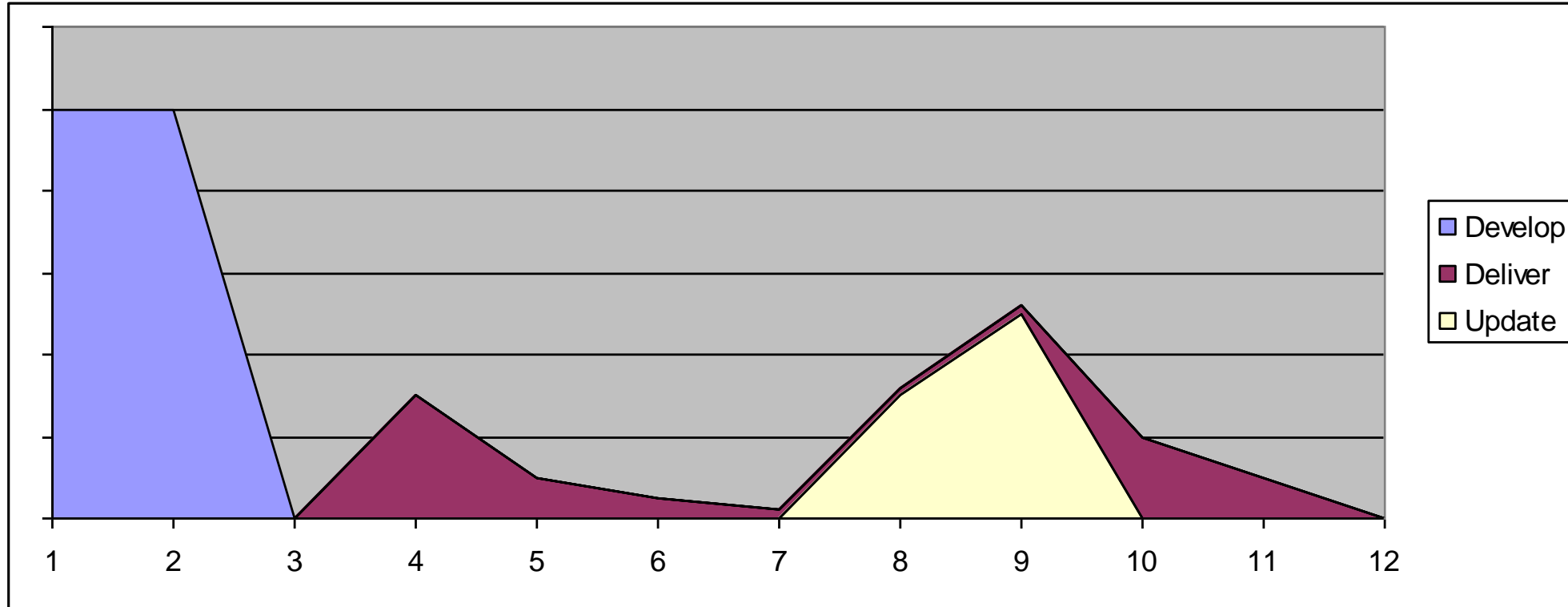
- Offline delivery model
- Offline delivery + Improvement + Delivery
- Online product, not tutored
- Online product, tutored

# ICT in Education – Offline delivery model



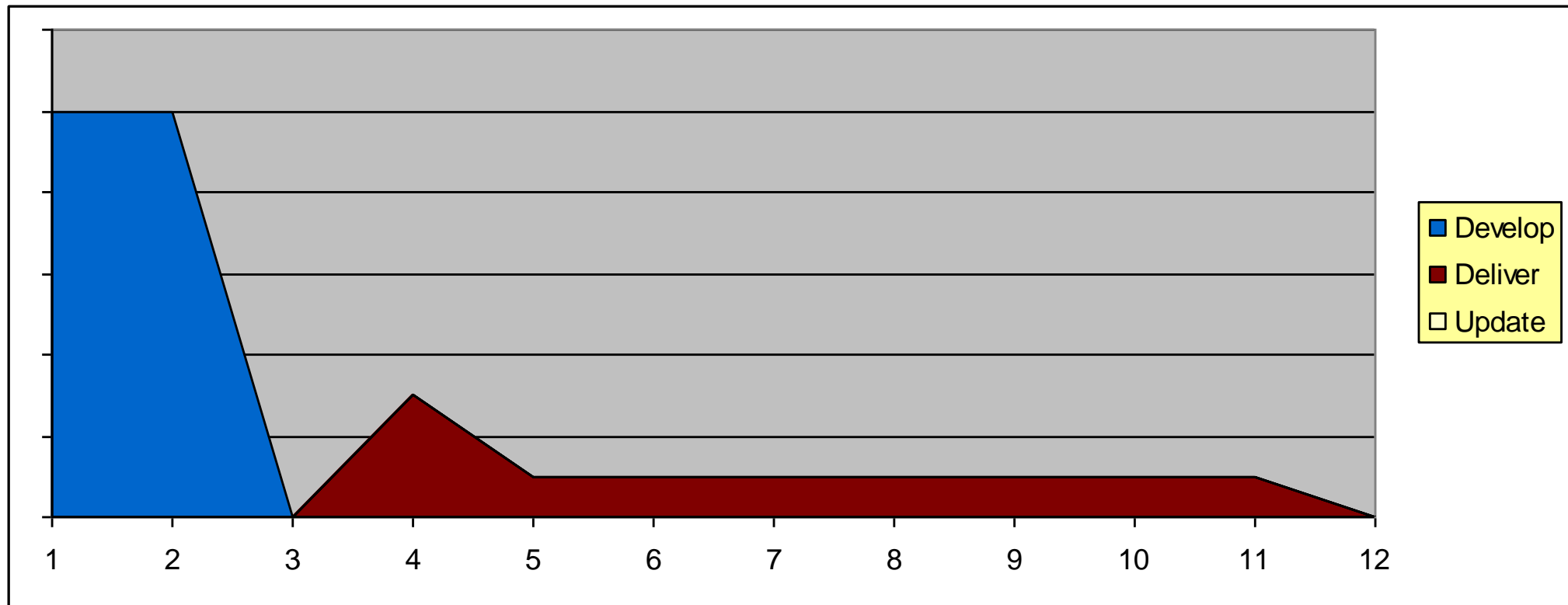
**Higher capital cost and steady delivery cost – Content is pre-packaged with Technology devices or delivered through CDs or other plug and play devices – The model is predominantly used for ICT in Education Deployment in Primary School**

# ICT in Education – Offline + Improvement + Delivery



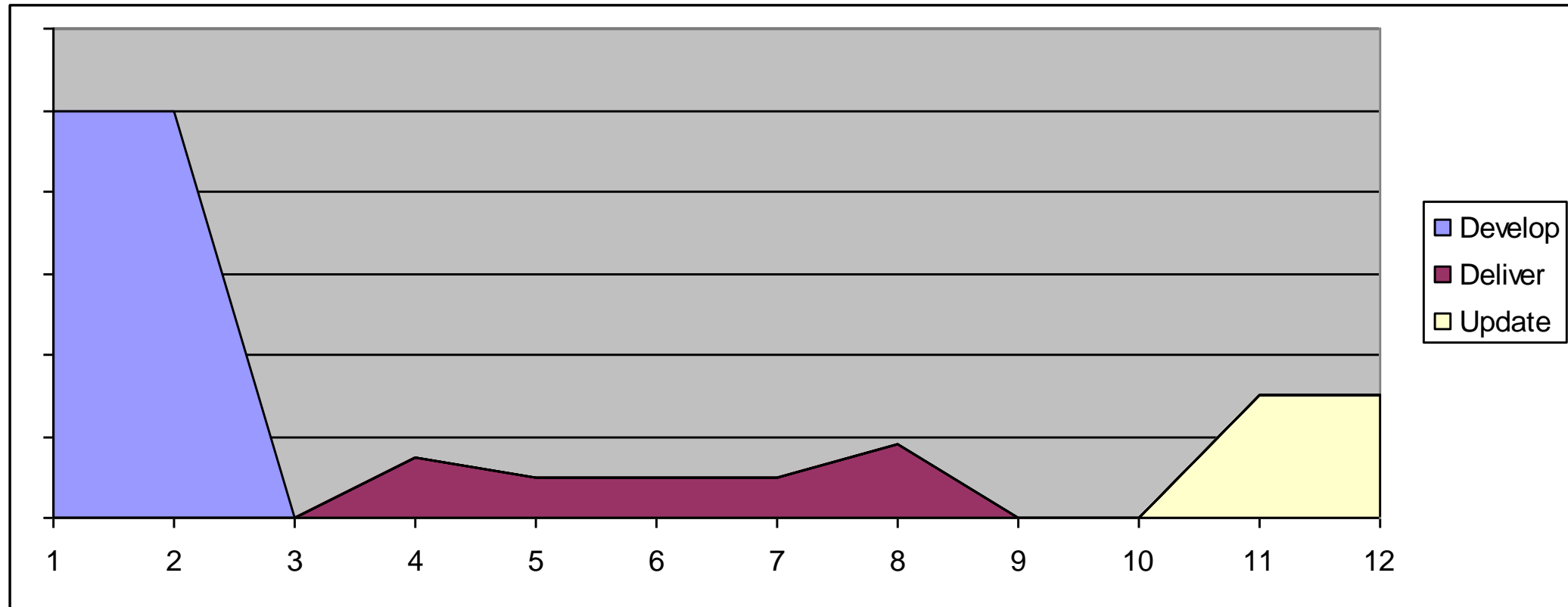
**Higher capital cost and steady delivery cost + Improvement cost towards version changes of DLR and periodical training – The model is mostly used in Secondary and Senior secondary level**

# ICT in Education – Online course delivery, not tutored



**Higher capital cost and steady delivery cost – MOOC Models: The model is predominantly used in Higher Learning Educational Institutions and Capacity building programmes (voluntary – need based)**

# ICT in Education – Online course delivery, tutored



**Higher capital cost and online tutor and support cost – Blended Learning Model: The model is used for capacity building of working professionals**



# In Summary...

- **The Total Cost of Ownership Tool is very handy for the; Min of Planning, Min. of ICTs and Min. of Educations for planning and deploying ICT in Education initiatives**
- **The TCO tool provides opportunity to use the limited resources in best possible way**
- **The TCO tool has been extensively used in Rwanda while deploying the One Laptop Per Child initiative**
- **The recurring / ongoing cost will range between 15% to 25% of capital investment based on the model of ICT in Education**
- **GESCI shall be upgrading the TCO tool with web based interactive platform considering the emerging Technologies, DLR, Training, Support and M&E options – Shall share it widely once it is ready**

# Thank you

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