Software Products

Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

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Mac GIMP
Mac GIMP

Online Dashboard
Recent AdWord Events Statistics
Leads By AdWords Report
Cost per Leads By AdWords Report

facebook
Facebook helps you connect and share with the people in your life.

WORLD WARCRAFT

Software
is eating
the world
WSJ, 2011-08-20

Software as a Product

- **Product**
  - A man-made artifact sold to customers in a market
- **Software**
  - Has an open-ended life-cycle: Is born, may life forever
  - Typically requires upfront capital investment (development)
  - Is cheap and easy to reproduce perfectly
- **Software** as a product
  - A product sold to either enterprise or retail customers
  - What is sold is typically a usage right plus services

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Core, Basic, and Whole Product

- **Core product** =
  - Core software
- **Basic product** = bundle of
  - Software + complementary materials + self-help services
  - Guarantees about fitness for use + indemnification
  - Support services
- **Whole product** = basic product +
  - Training
  - Consulting
  - Operations

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Enterprise vs. Retail Customers 1 / 2

- Enterprise customers (B2B)
  - Are willing to trade money for time
- Retail customers (B2C)
  - Are willing to trade time for money

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Enterprise vs. Retail Customers 2 / 2

“Some people spend time to save money, some spend money to save time.” [M10]

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Software Products, Projects, and Services

- Software products are provided by a software vendor
  - Commercial off-the-shelf software (COTS) (“Standardsoftware”)
- Software products can be operated by service providers
  - Service providers specialize in specific products
- Software projects are performed by consulting firms
  - Custom software (“Individualsoftware”)
- Many companies do all of the above

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Software Projects

- **Projects**
  - A process with a defined start and a defined end
- **Software** projects
  - Revenues correlate with performed labor
    - Fixed price vs. actual labor
  - Accounted for as revenue and expenses

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Software Products and Projects

Software Vendor	Product	Consulting Firm	Project
SAP	SAP Business One	accenture High performance. Delivered.	Widget Corp. BI Impl. 2008
SUGARCRM COMMERCIAL OPEN SOURCE	SUGARCRM COMMERCIAL OPEN SOURCE	it-novum Open-minded Business Solutions	German SME Sugar 2010
methodpark	stages	methodpark	Continental Stages 2010
Microsoft	Microsoft Office		

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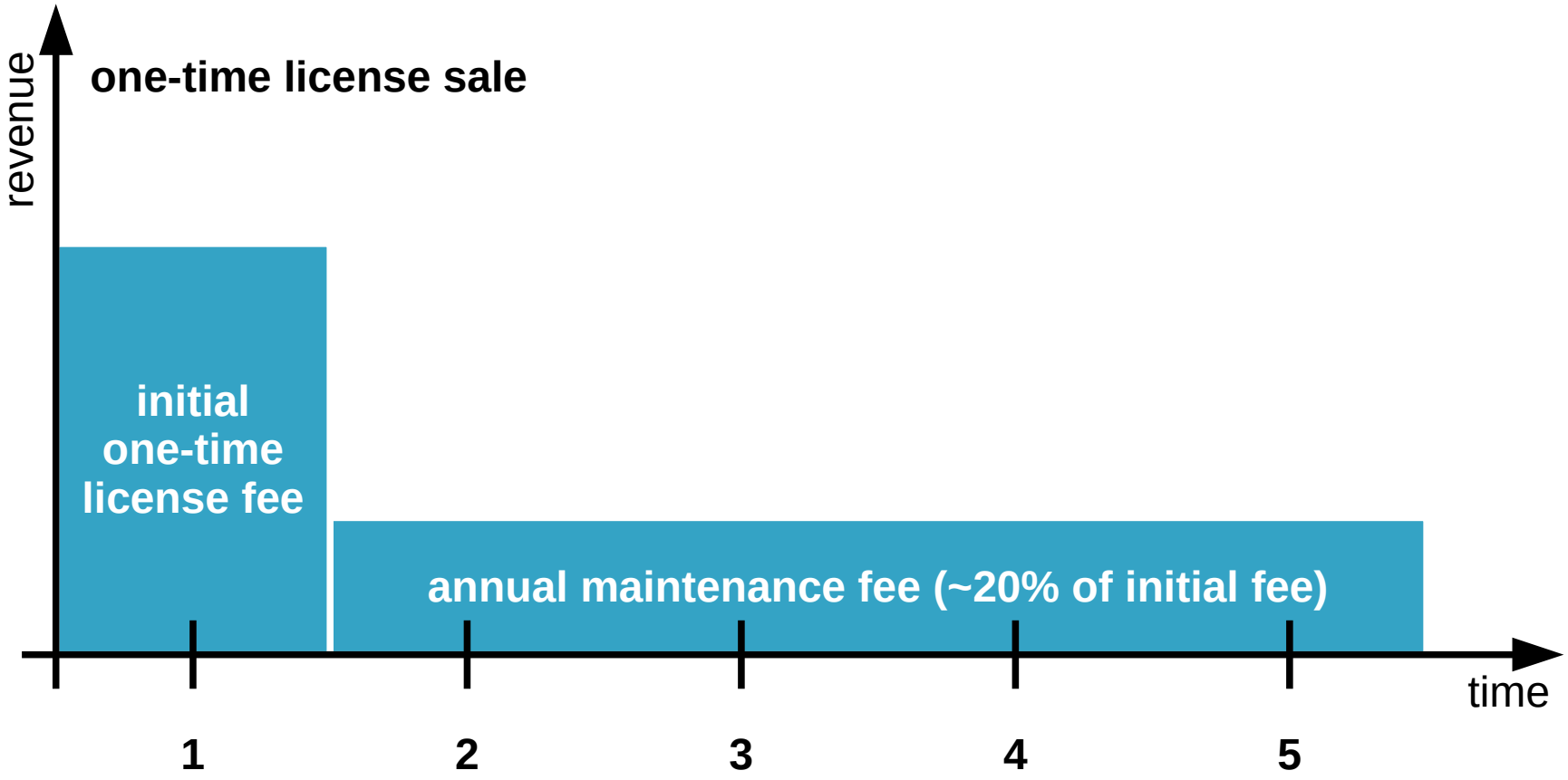
Software Product Revenue



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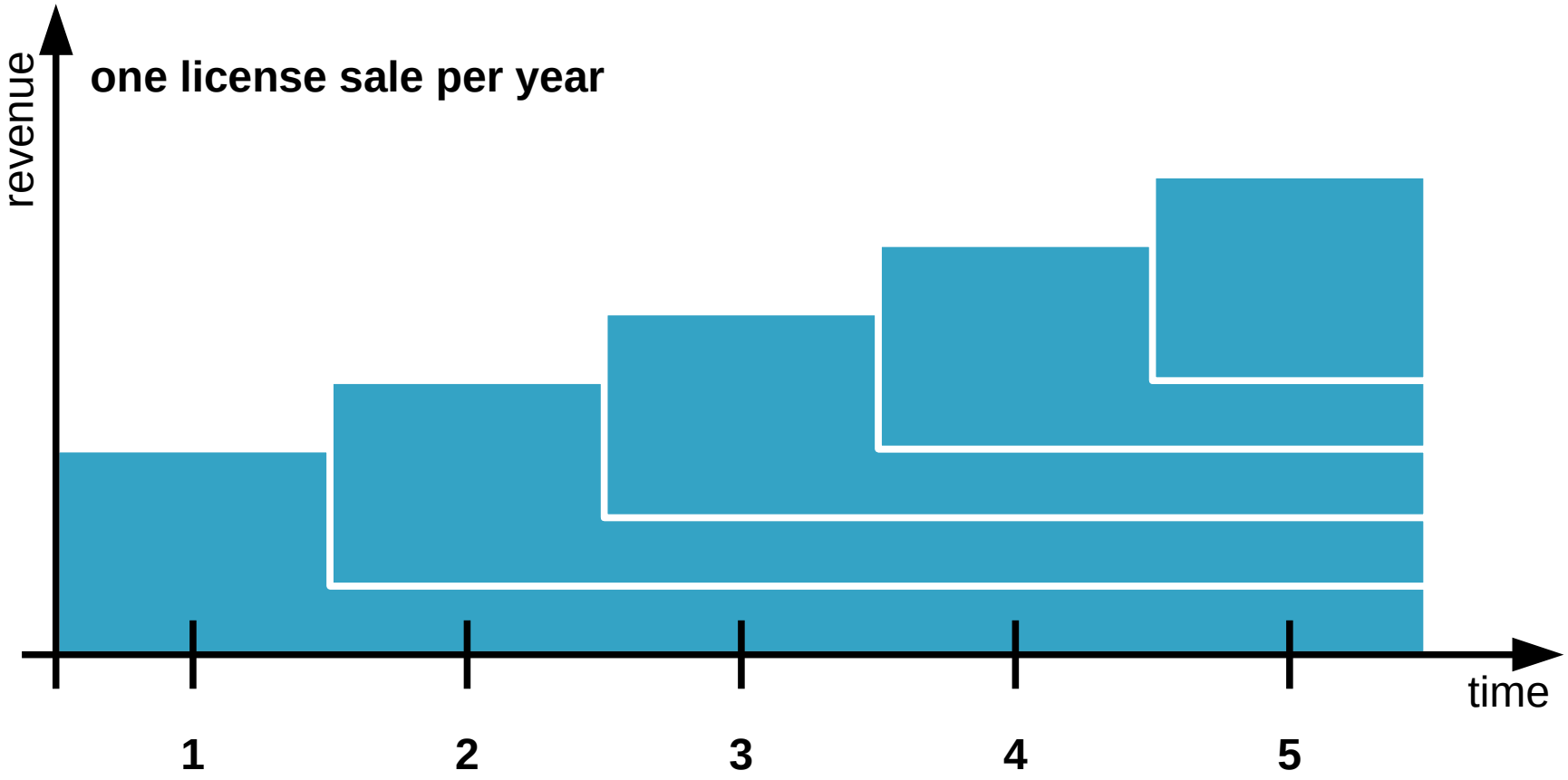
Accumulating Traditional Software Product Revenue



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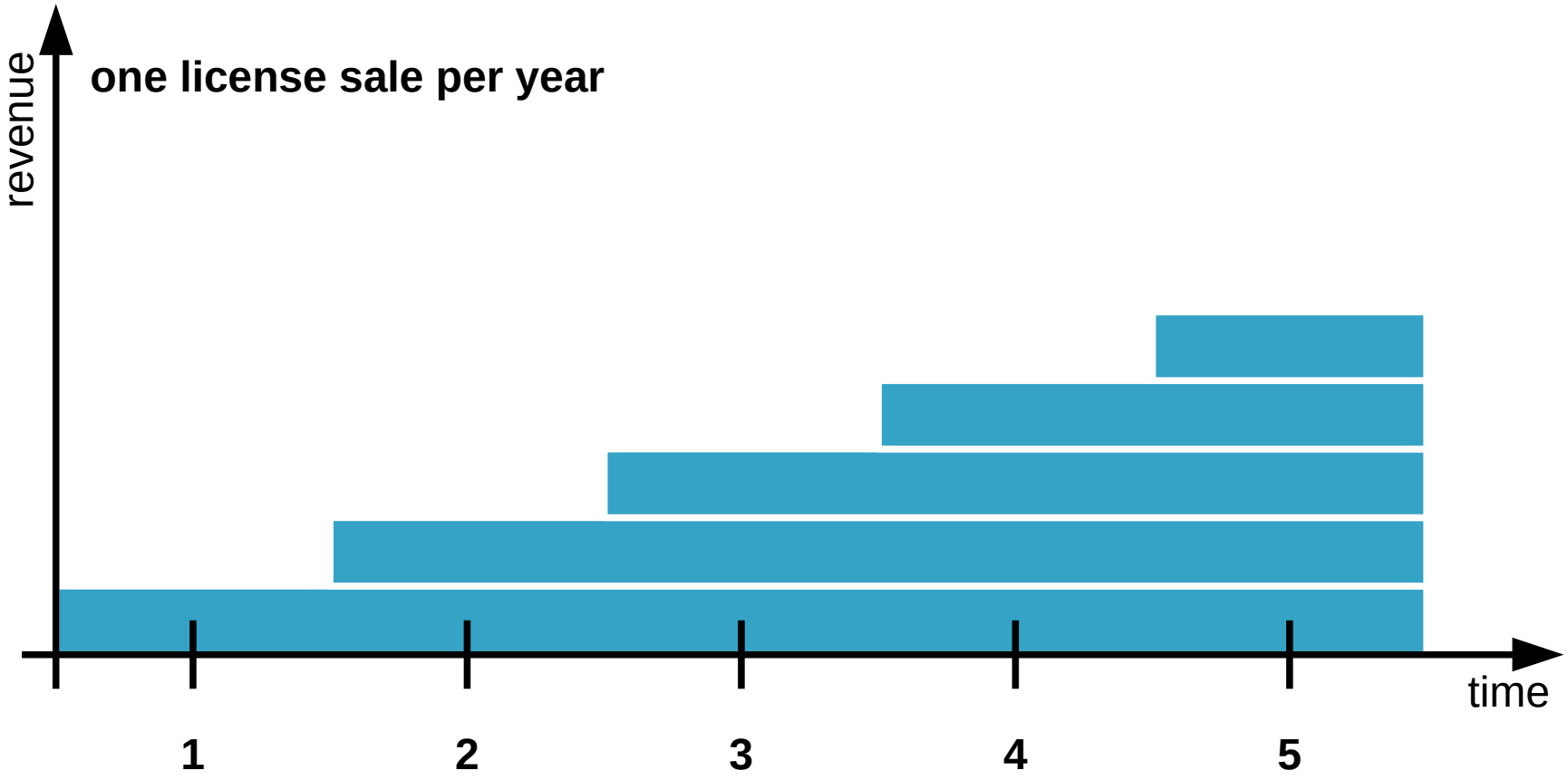
Accumulating Software Subscription Revenue



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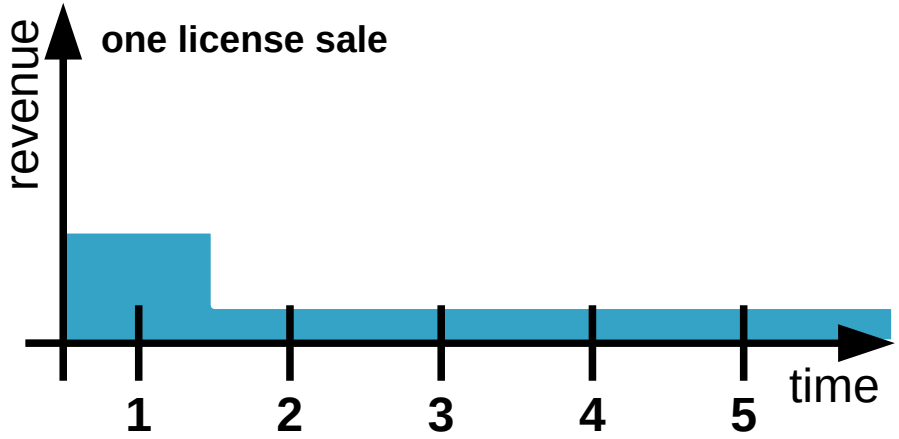
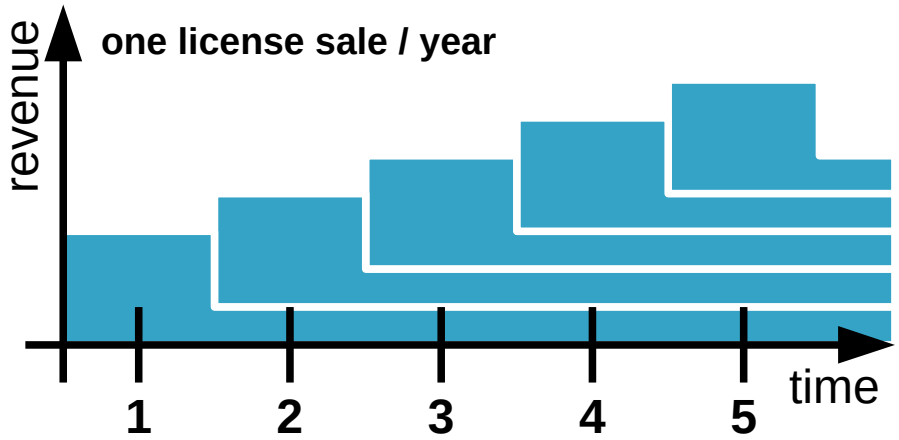
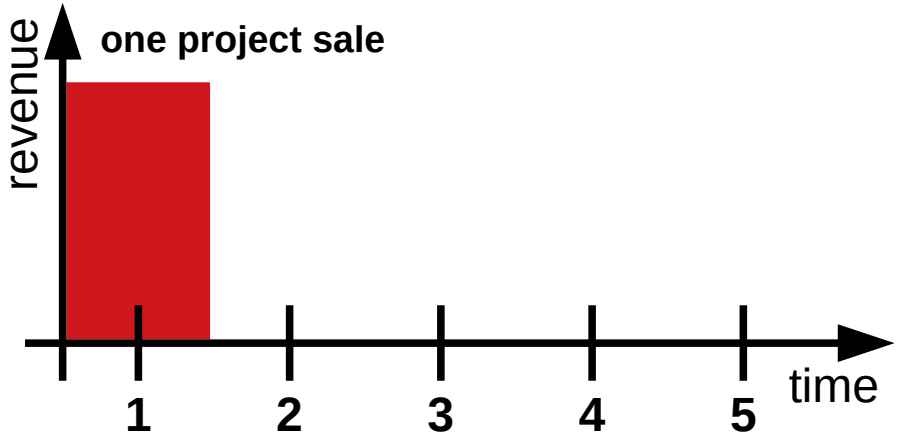
Software Product vs. Project Revenue

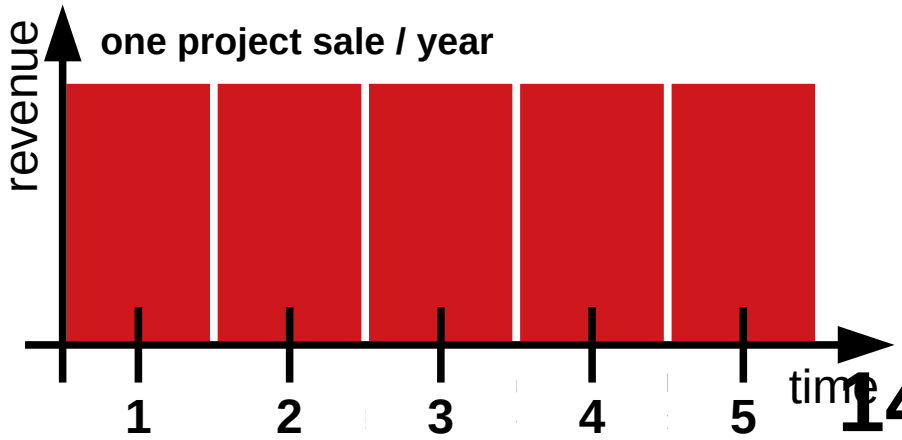
Product Revenue





Project Revenue





Software Product vs. Project Companies

	Consulting Firms (Custom Development)	Software Vendors (COTS Development)
Advantages	• Not capital intensive • Can be started easily	• Stable maintenance revenue • High market capitalization
Disadvantages	• Somewhat fragile revenue • Little long-term stability • High business volatility • Limited scalability	• Hard to get started • Requires upfront investment • May be slow to react • Most fail, few survive

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Whole product

Basic product

Usage rights

Software (core product)
- Core software
- Additional software (extensions + plug-ins, tools and utiltiies, integrations)

Complementary materials
- Documentation
- Training materials

Self-help services
- Forums, mailing lists
- Help and chat agents
- On-line tutorials

Pricing of usage rights
- Quantity: User, machine, time, …
- Duration: Perpetual, time-limited, …
- Structured: Initial license fee, regular maintenance fee

Guarantees (“insurance”)
- Fitness for use, certification
- Indemnification

Pricing of guarantees
- By damage: Loss of business, fines received
- Structured: Levels / bands, formula

Support services
- Hot-line support
- On-site servicing

Pricing of support services (SLAs)
- By availability: Incident-based, 9x5, 24x7
- By quality: First-level, second-level, third-level

Training
- In-house training
- Off-site training

Pricing of training
- Fixed fee
- Per participating person

Consulting
- Technical implementation services
- Strategic solution consulting

Pricing of consulting
- Fixed fee
- Time and materials

Operations
- Provision of SaaS (managed service)

Pricing of operations
- Quantity: Users, resources, …
- Duration: Always time-limited
- Structured: Set-up, subscription

Matching the Market

- Bundling of product features
- Addressing different markets
- Utilizing different channels

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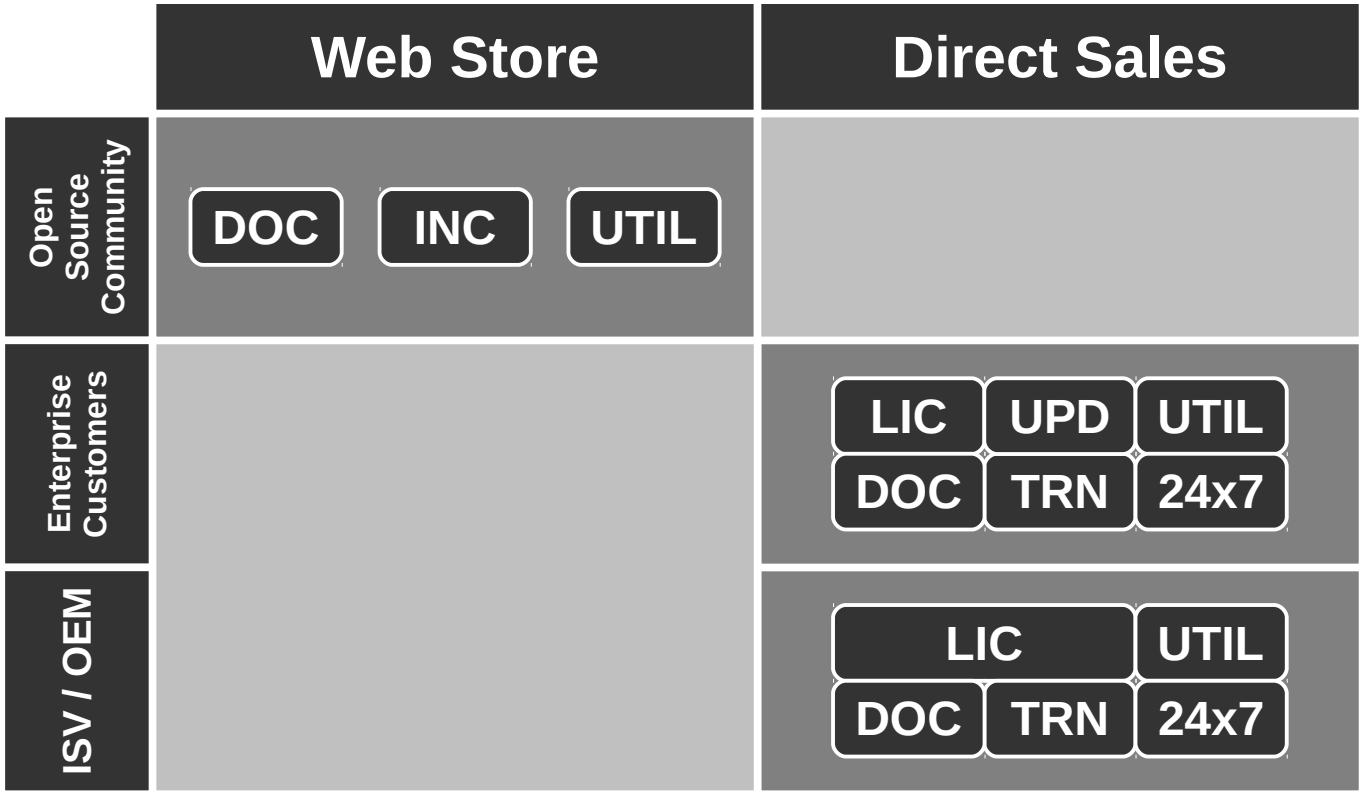
Commercial Open Source Products [WR13]



DOC documentation

INC incident-based support

UTIL utilities

LIC commercial license

UPD update service

TRN training

...

24x7 24x7 hotline

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Review / Summary of Session

- Software products
- Core, basic, whole product
- Products vs. projects

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Thank you! Questions?

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It is Friedrich-Alexander University Erlangen-Nürnberg – FAU, in short.

Corporate identity wants us to say “Friedrich-Alexander University”.

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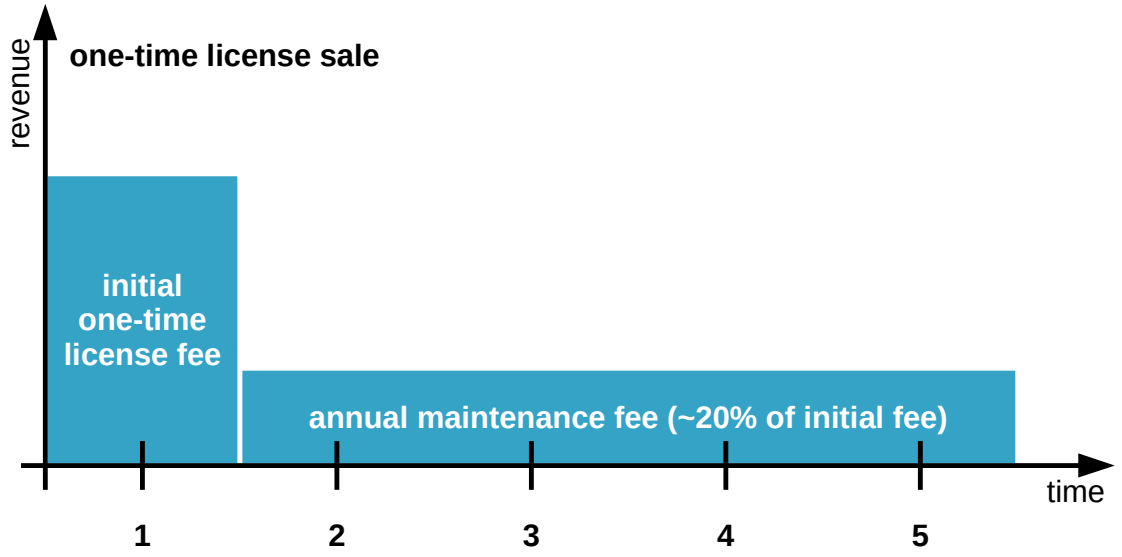

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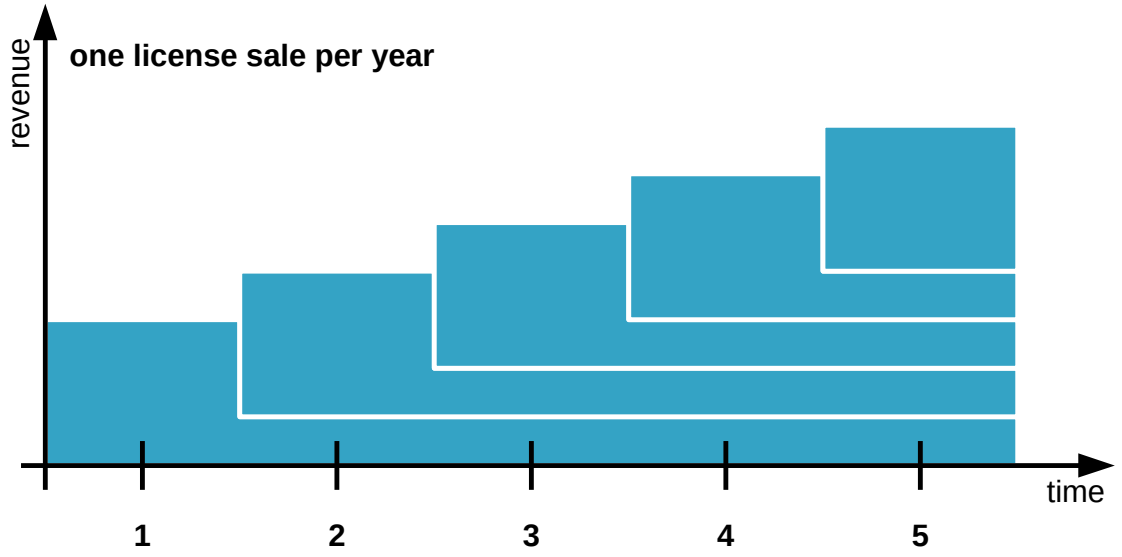

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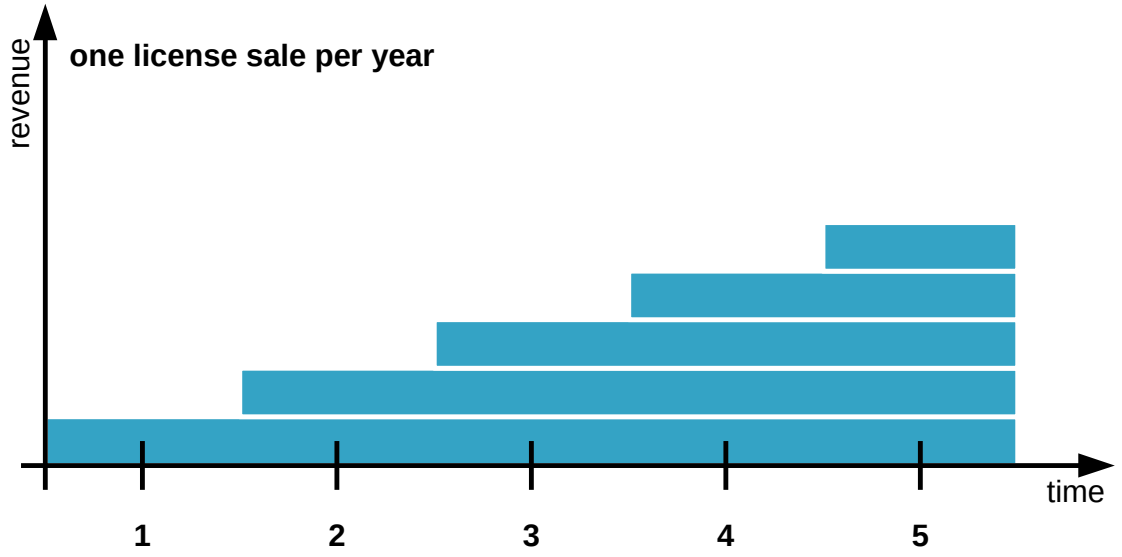

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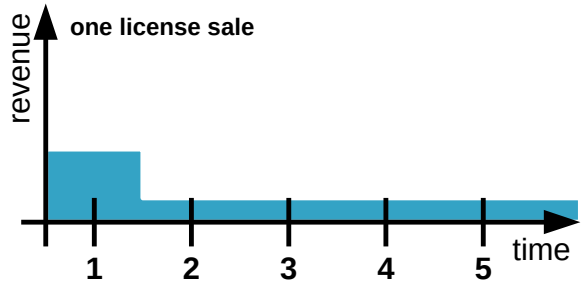

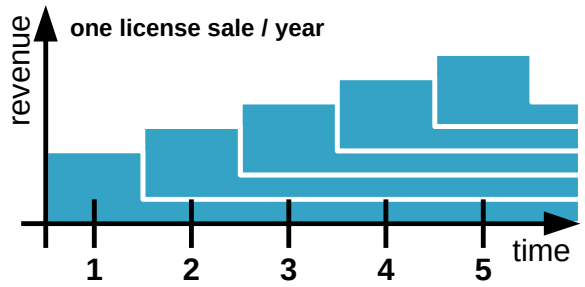

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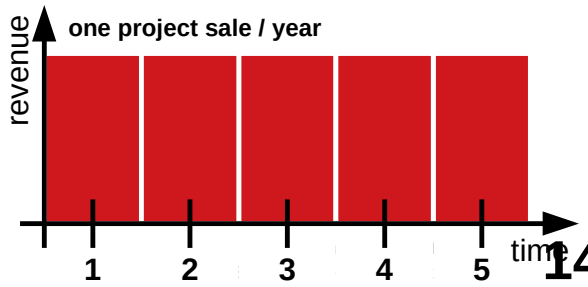

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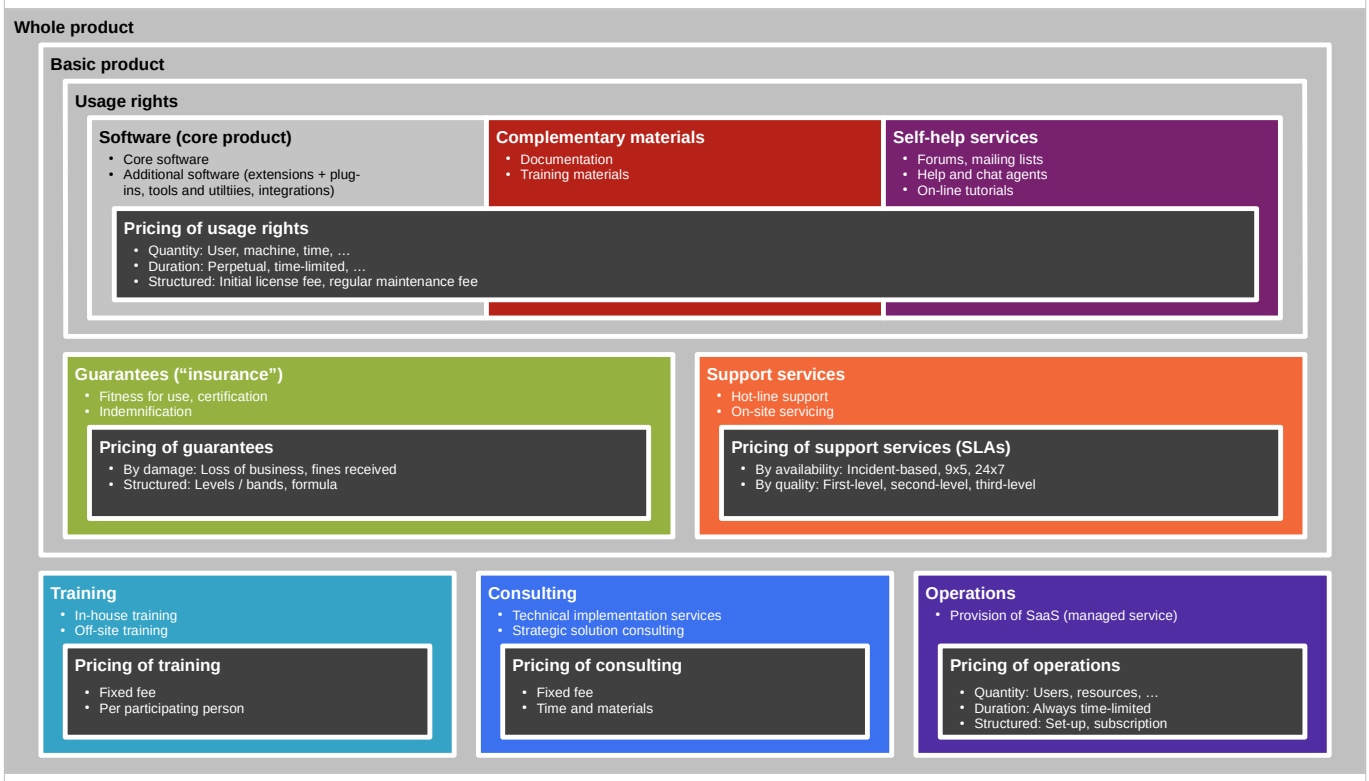
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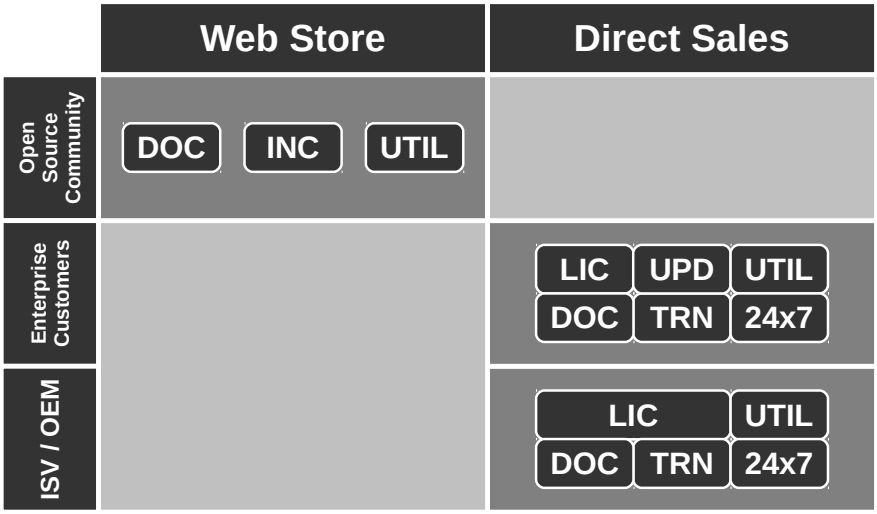
Commercial Open Source Products [WR13]



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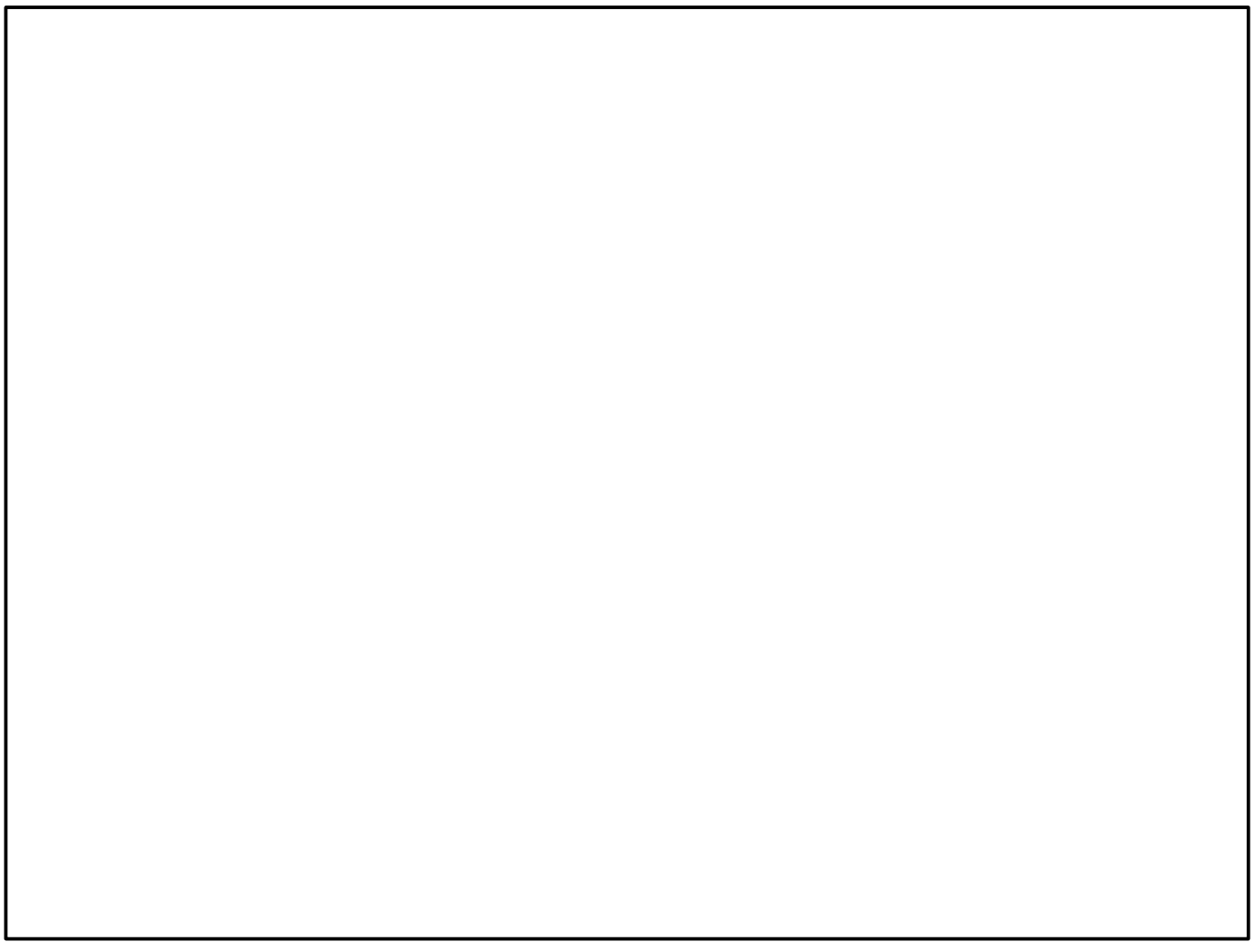
DR



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