WIBU SYSTEMS

Bundesministerium für Bildung und Forschung

IUNO
Nationales Referenzprojekt
IT-Sicherheit in Industrie 4.0

SECURITY
LICENSING
PERFECTION IN PROTECTION

Security of Platforms for production data and technology data

Results from IUNO, the national reference project security in Industrie 4.0 from BMBF

Oliver Winzenried | CEO Wibu-Systems
oliver.winzenried@wibu.com

WIBU SYSTEMS

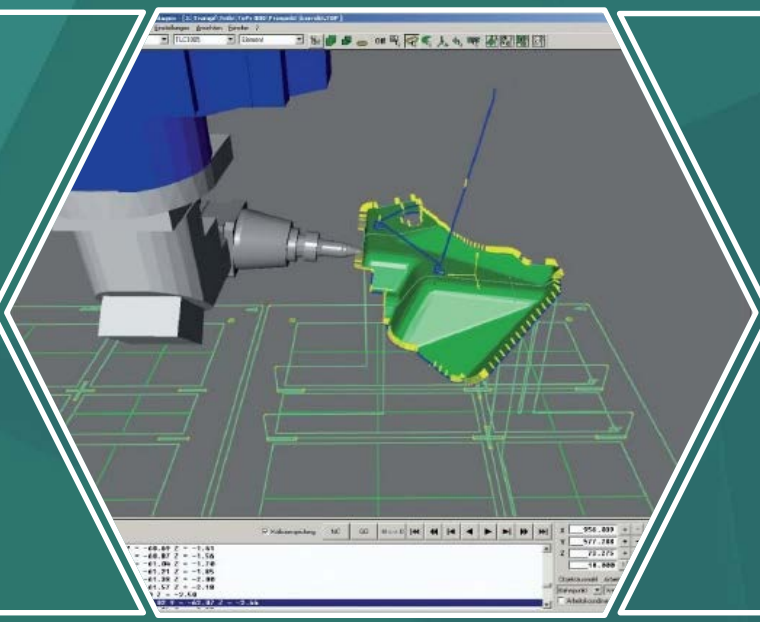
Bundesministerium für Bildung und Forschung

IUNO

Nationales Referenzprojekt
IT-Sicherheit in Industrie 4.0

Marketplace for technology data
(Secure Data)

Production related data usage control



Authentication in real time systems

Secure transfer of technology data

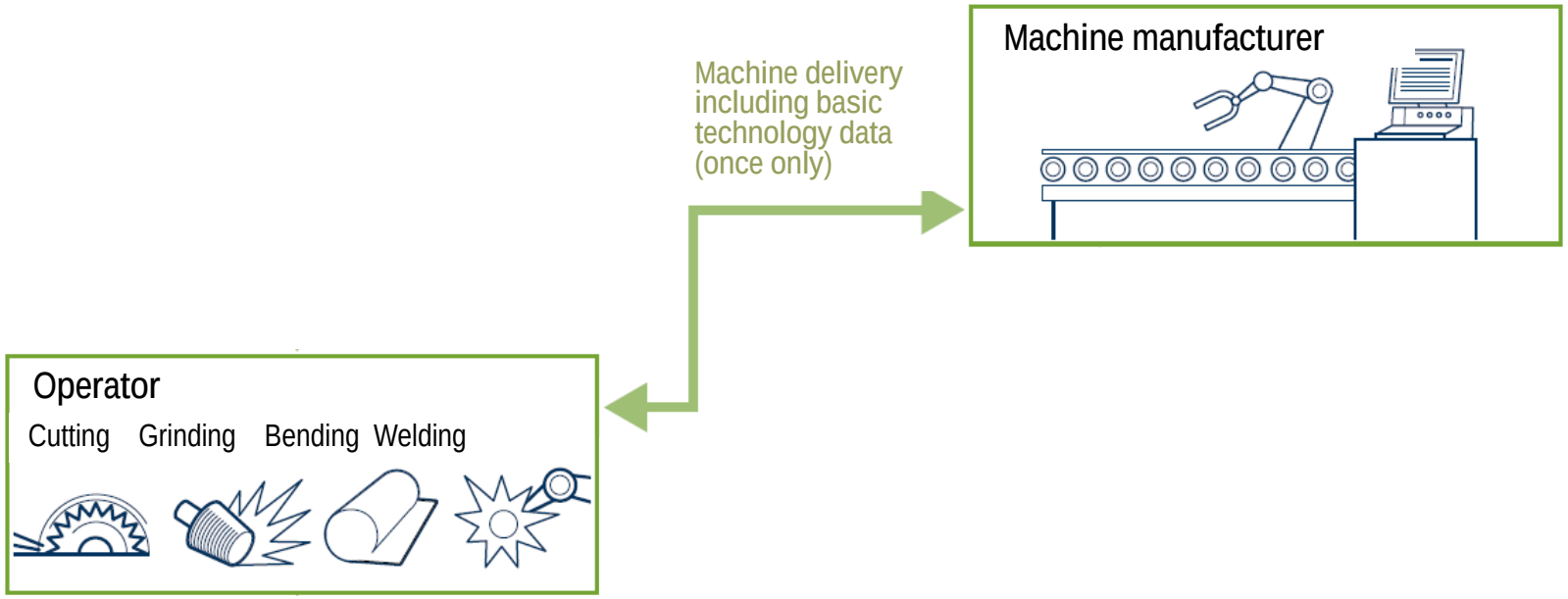
Digital rights management for production systems

The need of protection and licensing for data – not only for software

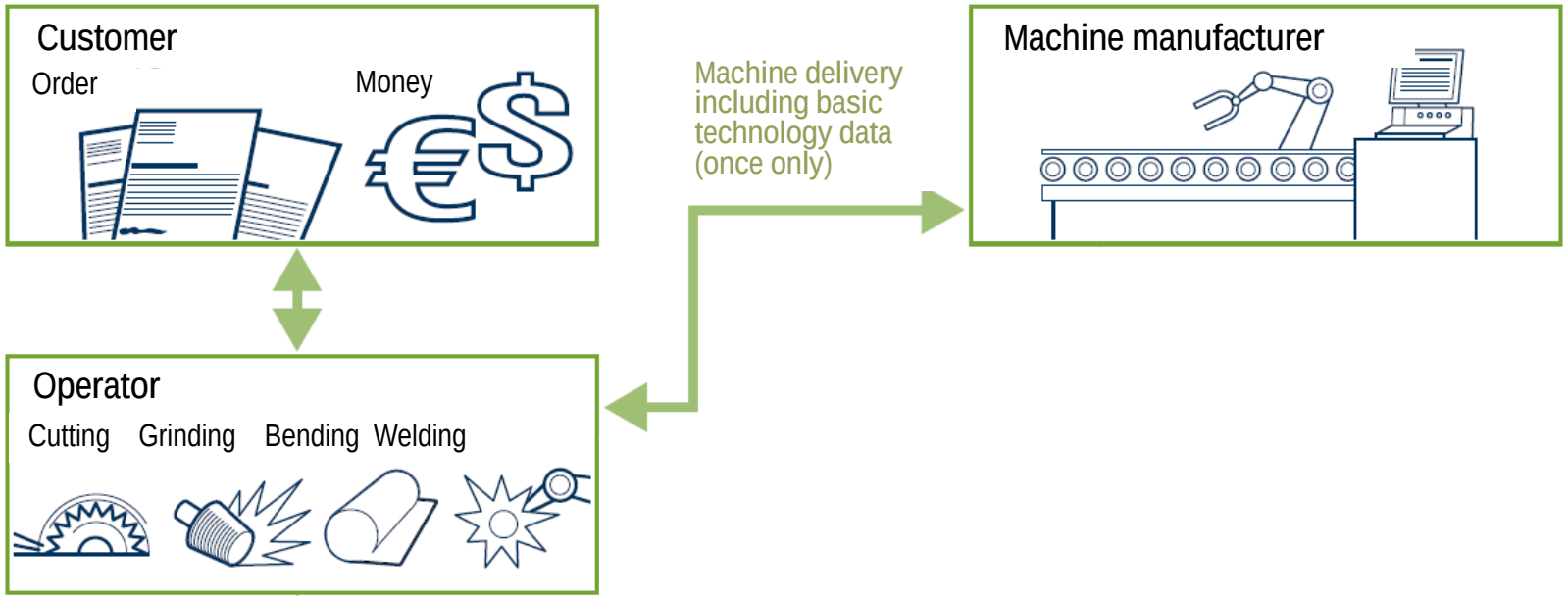
Security aspects

- Protection of intellectual property
- Licensing – use of data only on dedicated machine
- Creation of the prerequisites for digital rights management in industrial applications.

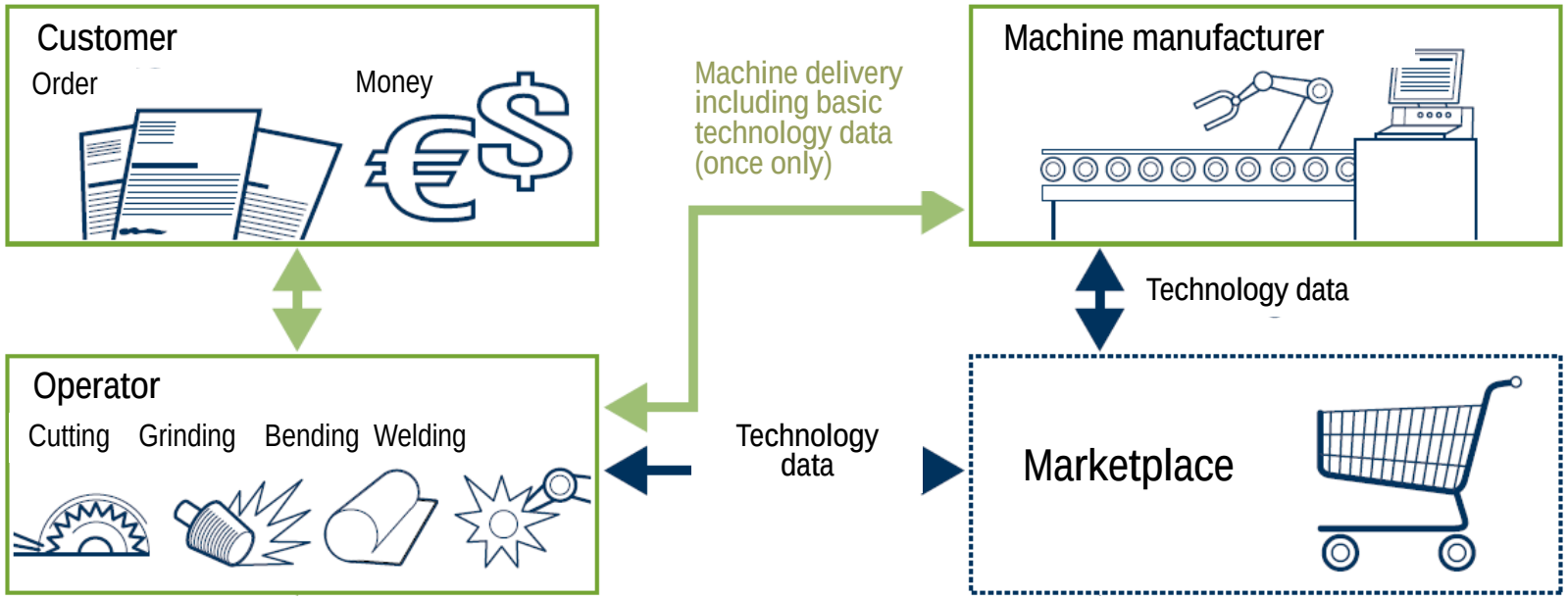
Marketplace for technology data



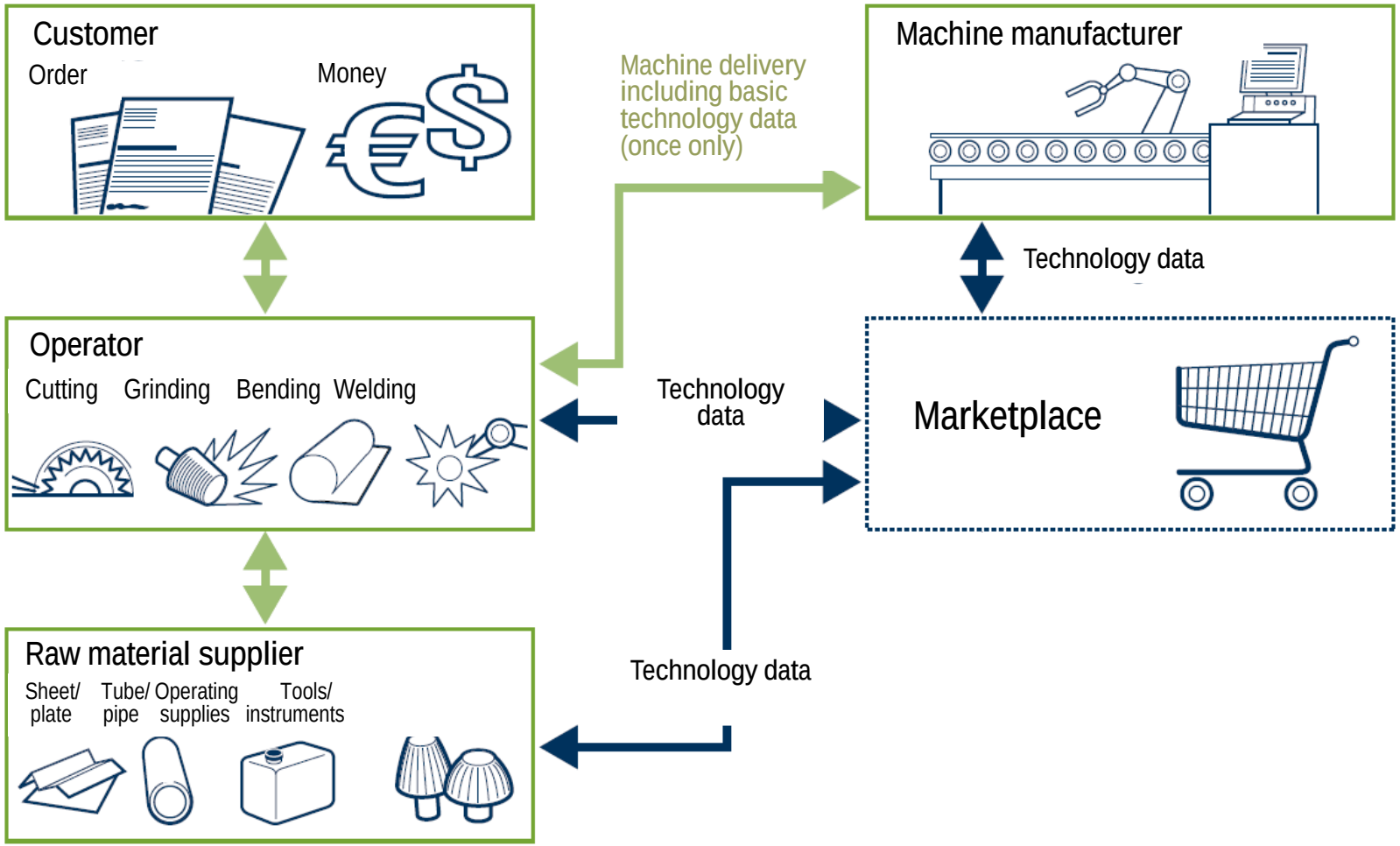
Marketplace for technology data



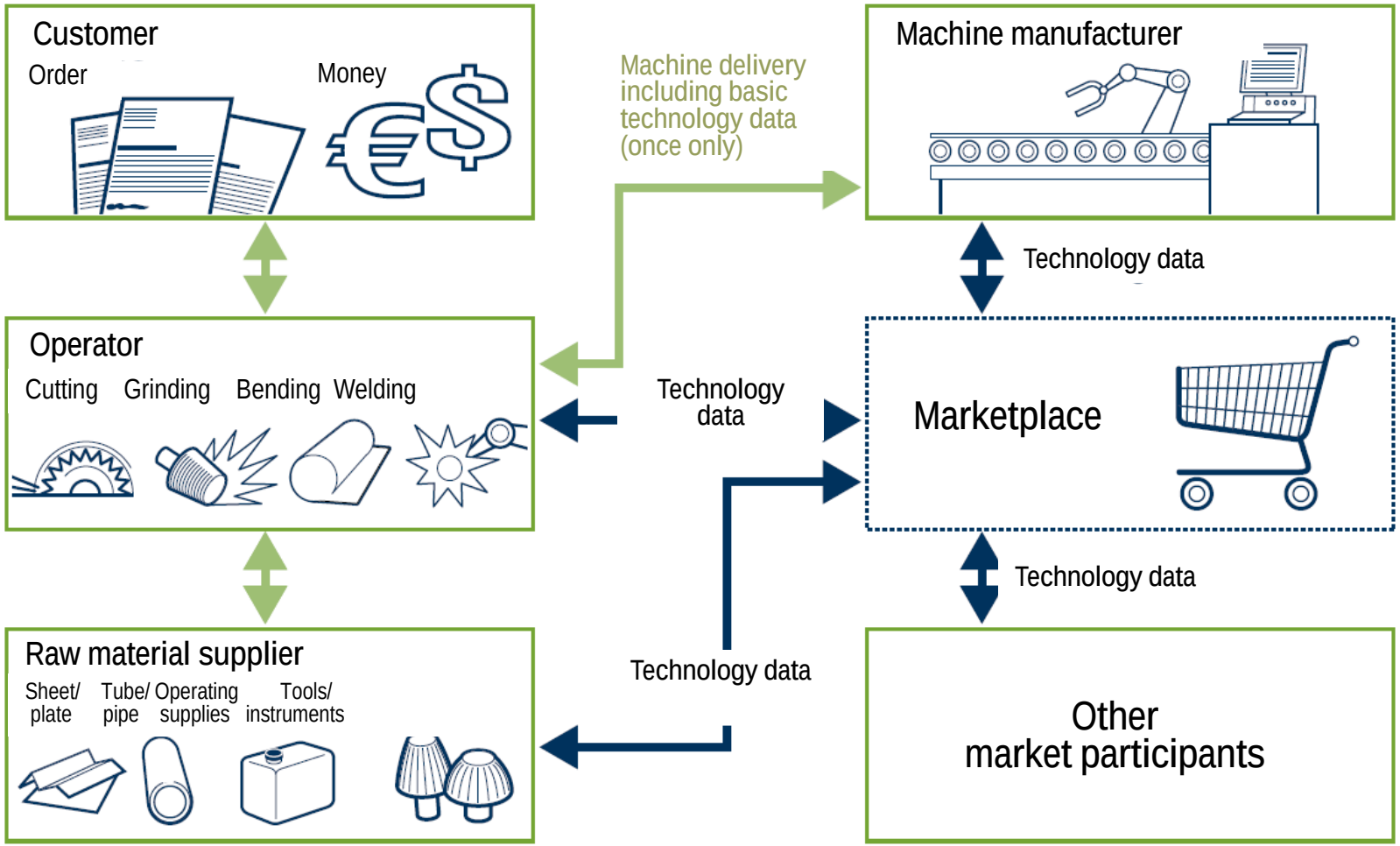
Marketplace for technology data



Marketplace for technology data

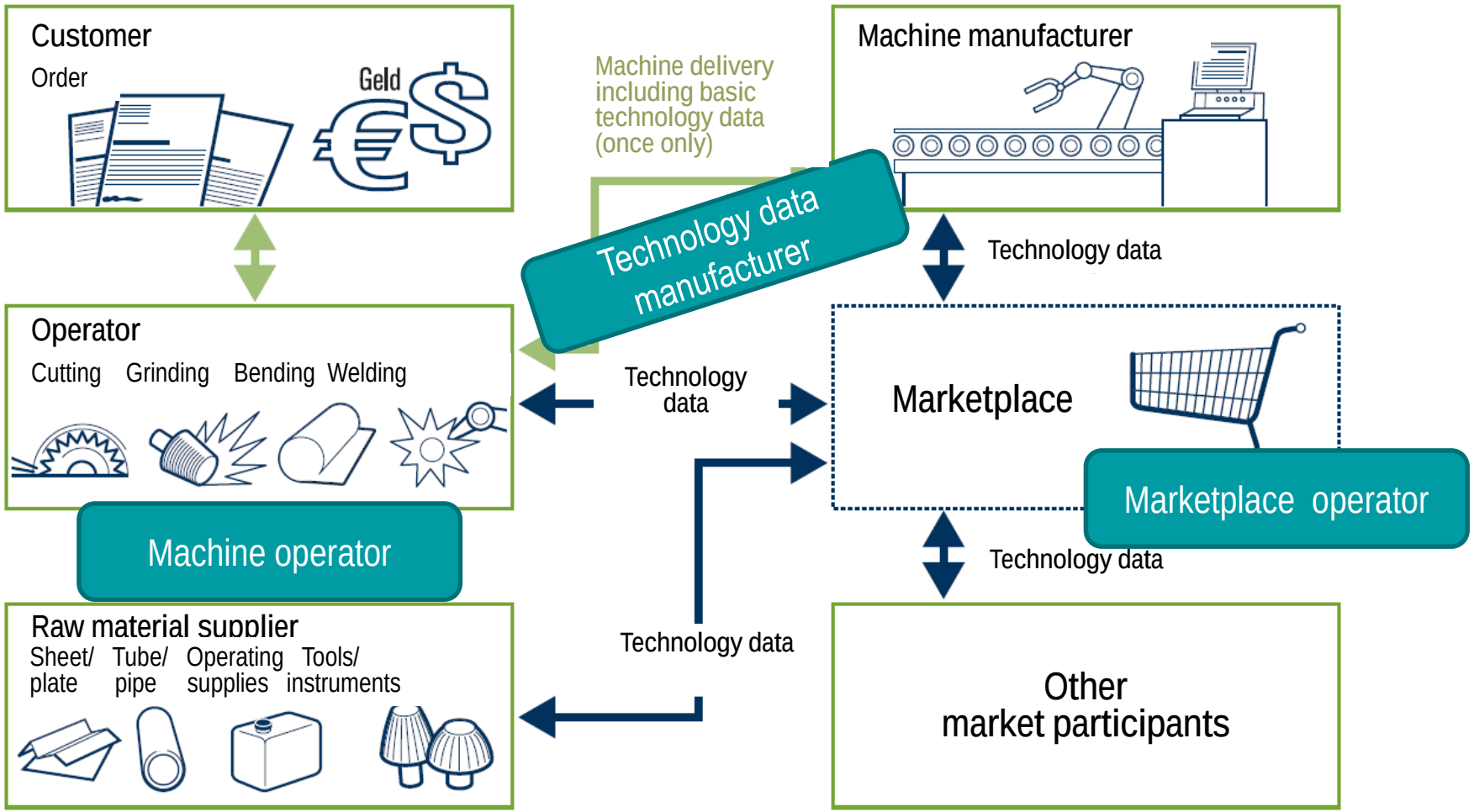


Marketplace for technology data



Source: Trumpf

Key Stakeholders

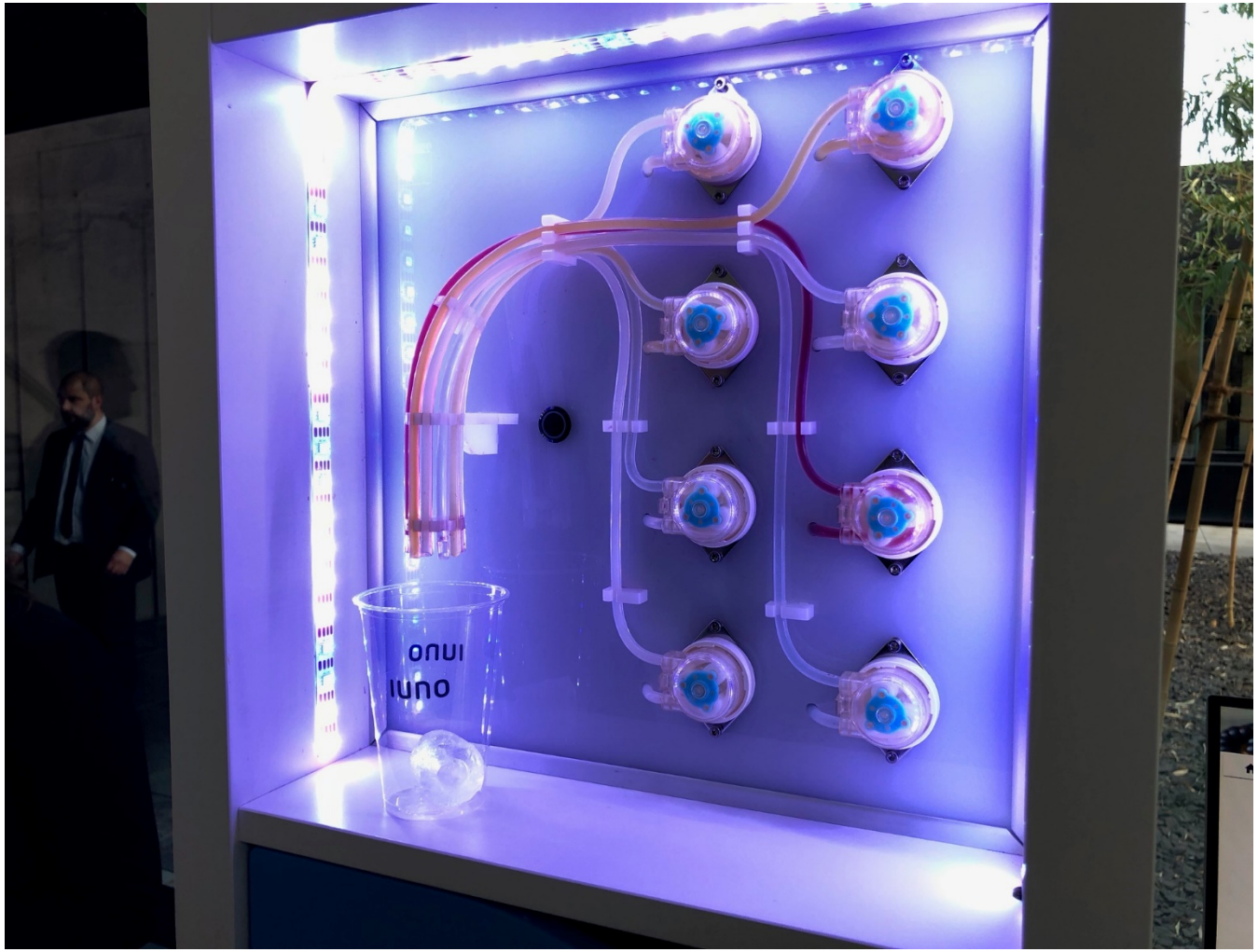


Source: Trumpf

Implementation principle

- Technology data is always encrypted. Local adjustments are relative in a defined range (+/- x%)
- The marketplace functionality is handled inside the machine control software.
  - The integrity of this part is also protected with the CodeMeter Technology against reverse engineering and manipulation
- The licenses are stored in a secure dongle
- Licenses can be transferred online and offline
- The marketplace is the contracting party for every participant

Cocktail mixer as demonstrator

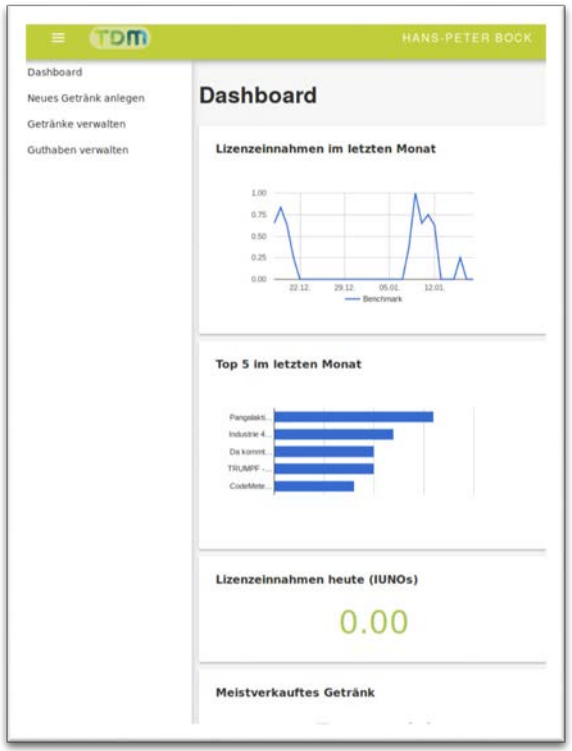


Cocktail mixer as demonstrator

- Why? – The principle is the same, the machine is more handy than a laser cutter
- The cocktail recipe is the technology data
- The whole system is really life:
  - The marketplace is hosted at Axoom
  - The licenses are generated on LicenseCentral at WIBU-SYSTEMS AG
  - The payment is done against the Bitcoin test blockchain
  - Every machine is online and holds a CmDongle as keystore

Marketplace live

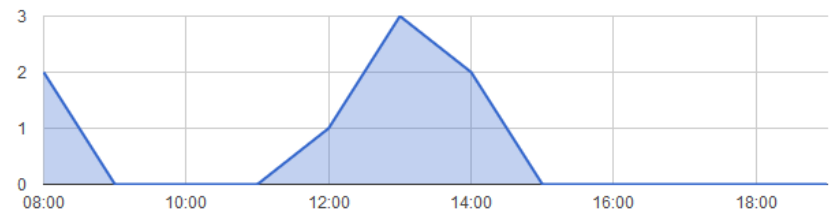
https://iuno.axoom.cloud/



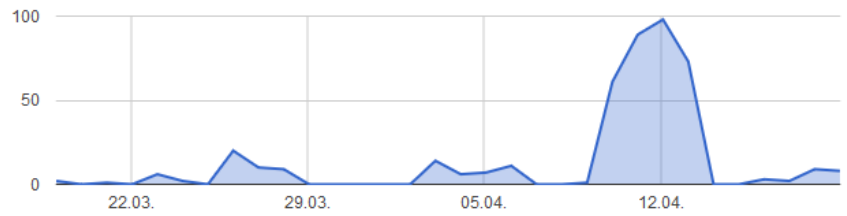
Dashboard BACKUP

TDM MARKTPLATZ STATISTIKEN ANMELDEN / REGISTRIEREN

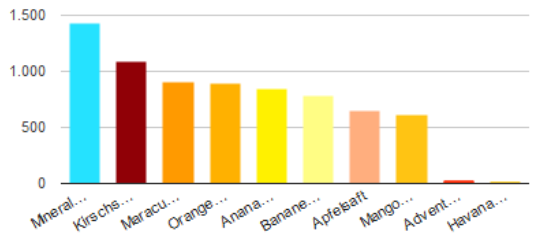
Lizenzverkäufe im Tagesverlauf



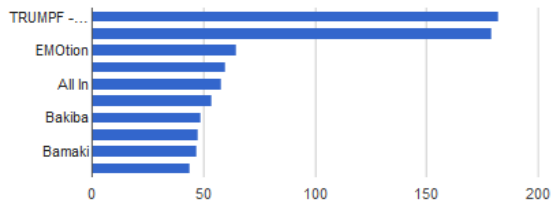
Lizenzverkäufe im letzten Monat



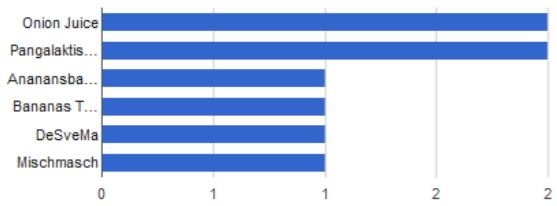
Die beliebtesten Zutaten



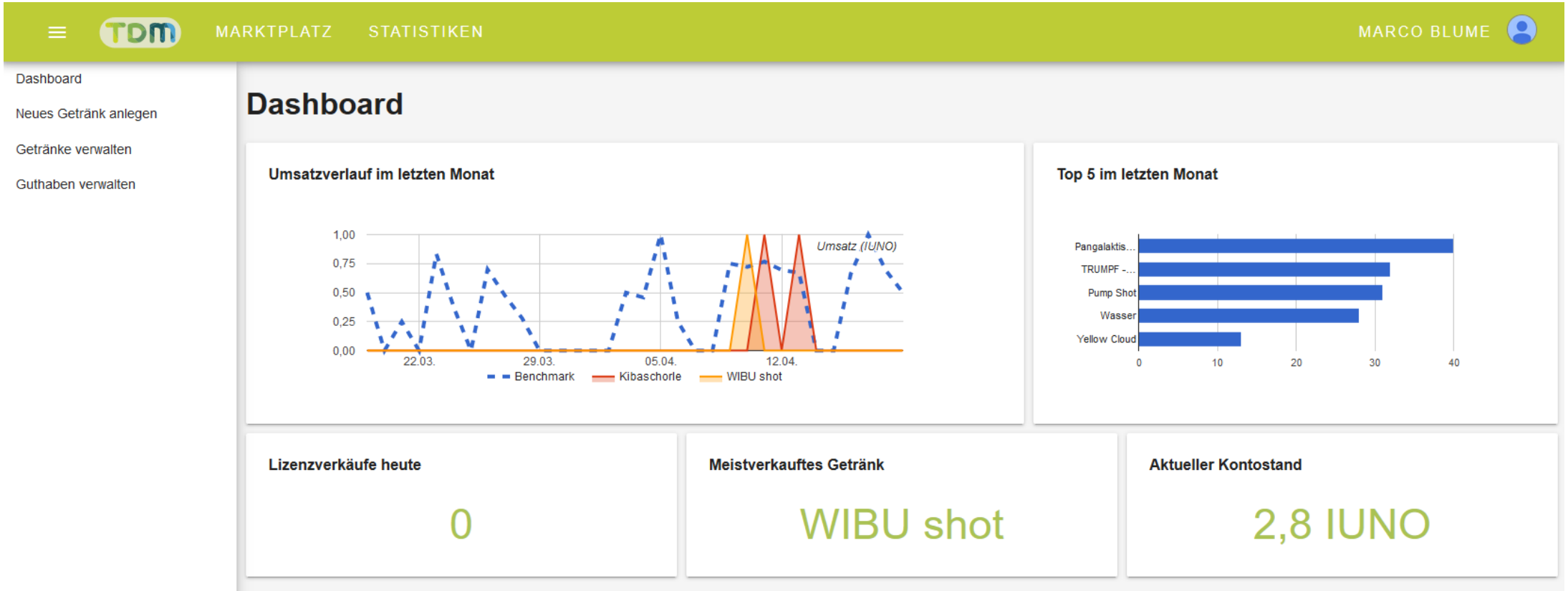
Die beliebtesten Rezepte aller Zeiten



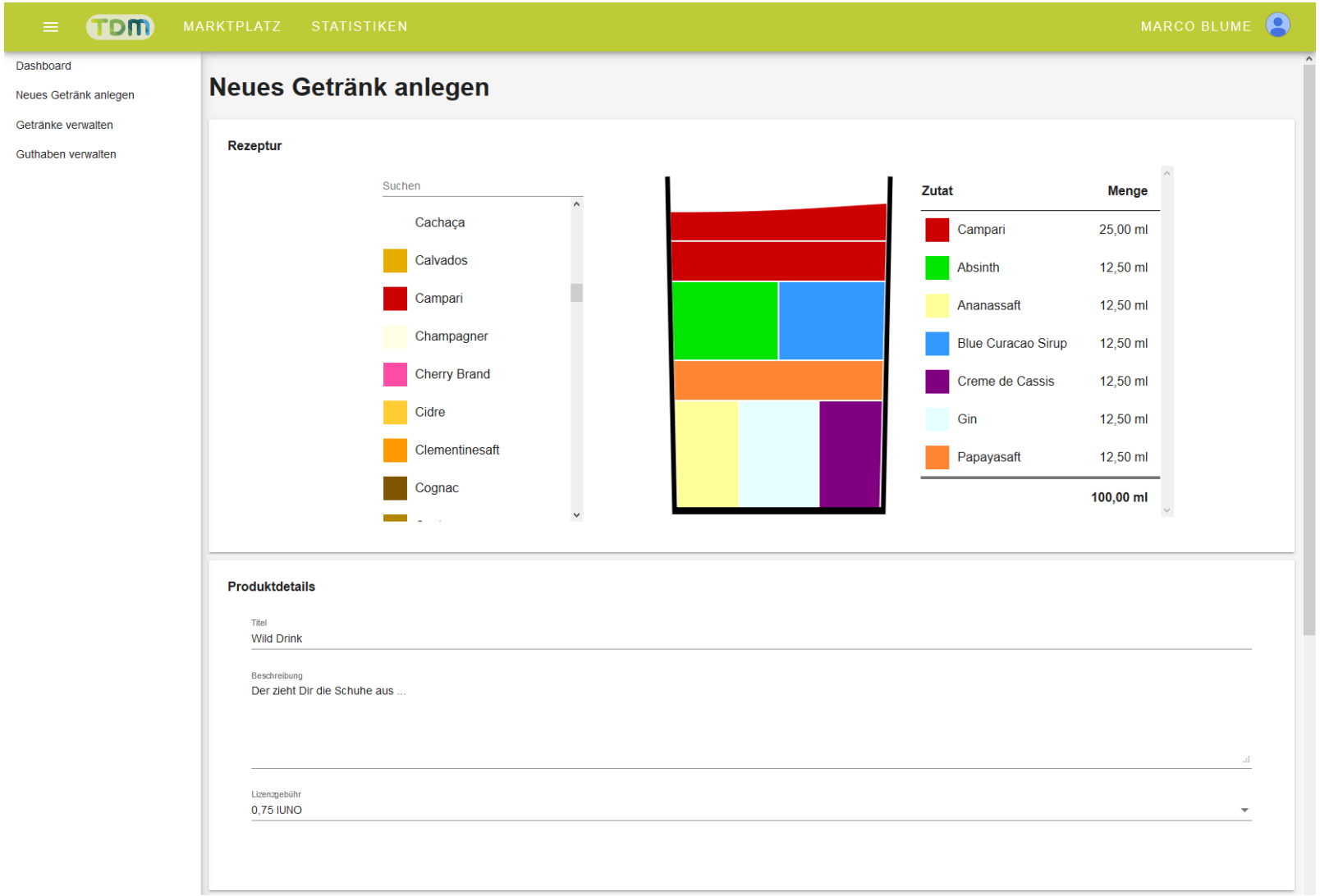
Die beliebtesten Rezepte heute



Personal Dashboard BACKUP



Mix (configure) Drink BACKUP



WIBU-SYSTEMS AG

- Founded in 1989
- By Oliver Winzenried and Marcellus Buchheit
- Headquarters in Germany (Karlsruhe)
- Focus on Protection, Licensing and Security
- Technological leader with international patents
- ISO 9001:2015 certified

WIBU-SYSTEMS worldwide

- Subsidiaries in Seattle, USA – Shanghai and Beijing, China – Belgium – France – Ireland – Netherlands – Portugal – Spain – UK
- Exclusive distribution partners in Japan – Korea – Russia and many more countries
- Top 2 vendor in hardware-based protection
- Top 3 vendor in software licensing
- Global Awards

Many thanks for your kind attention.

Visit WIBU-SYSTEMS in **hall 6, booth C15**

and IUNO in **hall 6, booth D02**

Germany: +49-721-931720

USA: +1-425-7756900

China: +86-21-55661790

http://www.wibu.com

info@wibu.com

© WIBU-SYSTEMS AG 2018 - How secure do you want your application to be?