

Country Digitization & Acceleration Plan - Germany

CSR and NetAcad

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Agenda

Commitment & VSEM

Competence cycle & 3 Pillars

Strategy: Bringing the
nation back in

Partner ecosystem & team



Germany

INITIATIVES & IMPACT

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Investment of
€500 million

Innovation

Innovation center
"Open Berlin"

Workshops for
mid-sized
companies

Investment in
startups & venture
funds

Security &
Transparency

Security Center
of Excellence

IT & cyber security
training programs

Education

Increase NetAcad
graduates

"Deutschland
Digital"

Provide digital
competence for non-IT
professionals

Cisco confidential.

Research & Education



Provide digital competencies for non-IT professionals in small and medium sized companies



expand the Networking Academy, increase the number of graduates in Germany from currently 35,000 a year to 80,000 in three years



„Deutschland Digital“

Entrepreneurship & Innovation



Smart Cities & Regions



openBerlin innovation center, opened in 2015, to bring together customers, startups, partners and research institutions to work on solutions



Innovation workshops, focussing on mid-sized companies, work on digital solutions and business models



Economic Clusters



investment in start-ups and venture funds in Germany with priority areas such as security, cloud, IoT



Research initiative translating Germany privacy and data protection regulations into a software architecture for cloud services - „Security Center of Excellence“

Infrastructure



Cisco is looking to partner with the public sector and contribute to large-scale transformation projects



CDA NetAcad Germany CSR Commitment

- Support the national digital agenda
- Train the young generation and the workforce to be IoE economy ready
- Improve the competitiveness of the German industry and service sector
- Fertilizing a start-up culture and entrepreneurship



Extended CDA Germany NetAcad VSEM

3 years FY16 to FY19

V

Combining country innovation with social integration = Social Impact ^x

Innovative people applying the power of the network through connected collaboration create social and business impact.

S

Train the young generation, the existing workforce and refugees to be IoE economy ready
Bringing together technology, people, partnerships, and sustainable execution

CDA Plan education for profit

NetAcad traditional

NetAcad for Refugees

Awareness raising,
social media and
marketing

Education for
employees

Build on installed base of
dedicated NetAcad partners
and instructors

Building on language
variety of the global
learning platform

IoE skills demand
awareness raising

Integrate key Cisco
technologies into the
NetSpace platform

Growing on the edges: smart
grid, digitized mechanical
engineering, automation

Active labor market policy
and further education

Easy to access profiling
(skills test)

Internal trainings for
employees + further training
for unemployed

Learning innovation,
hackathons, eCompetence
Framework

Partner ecosystem with
established further training
institutions and NGOs

Social networks campaign

Active labor market policy
and further education

E

Run the Business

- Massive localization and sector specific learning content
- Evolve Networking Academy's national partner sustainability model and program
- Stakeholder relations and multi-platform partner development

M

Networking Academy: % Growth, Student Satisfaction, Instructor Satisfaction, % Growth Cert Ready Individuals

YoY Perception Ratings,
YoY Industry Rankings,
Web & Social Media
Interaction

% Portfolio w/Platform
support, # localized offerings
and pipeline, offerings time to
market

Country Stakeholder value
perception,,
% Discrete student growth

% individuals building
capabilities

Raus aus dem goldenen Käfig!

Beispiel Hamburg



Internationaler Bund IT-Akademie Hamburg
G18 Hamburg
Berufliche Schule City Nord BS28
Berufliche Schule Farmsen
Hamburg University of Technology (TUHH)
Stadtteilschule Wilhelmsburg

Unsere bestehenden Kontakte: IT-Berufe, Informatik Studiengänge und technische Ausbildungsgänge....

Wichtig für den Erfolg der CDA Strategie:

- Wie werden wir relevant für die nicht-IT Berufsausbildungen?
- Wie erreichen wir Flüchtlinge mit einer IT-Vorbildung oder Interesse an IT?

Agenda

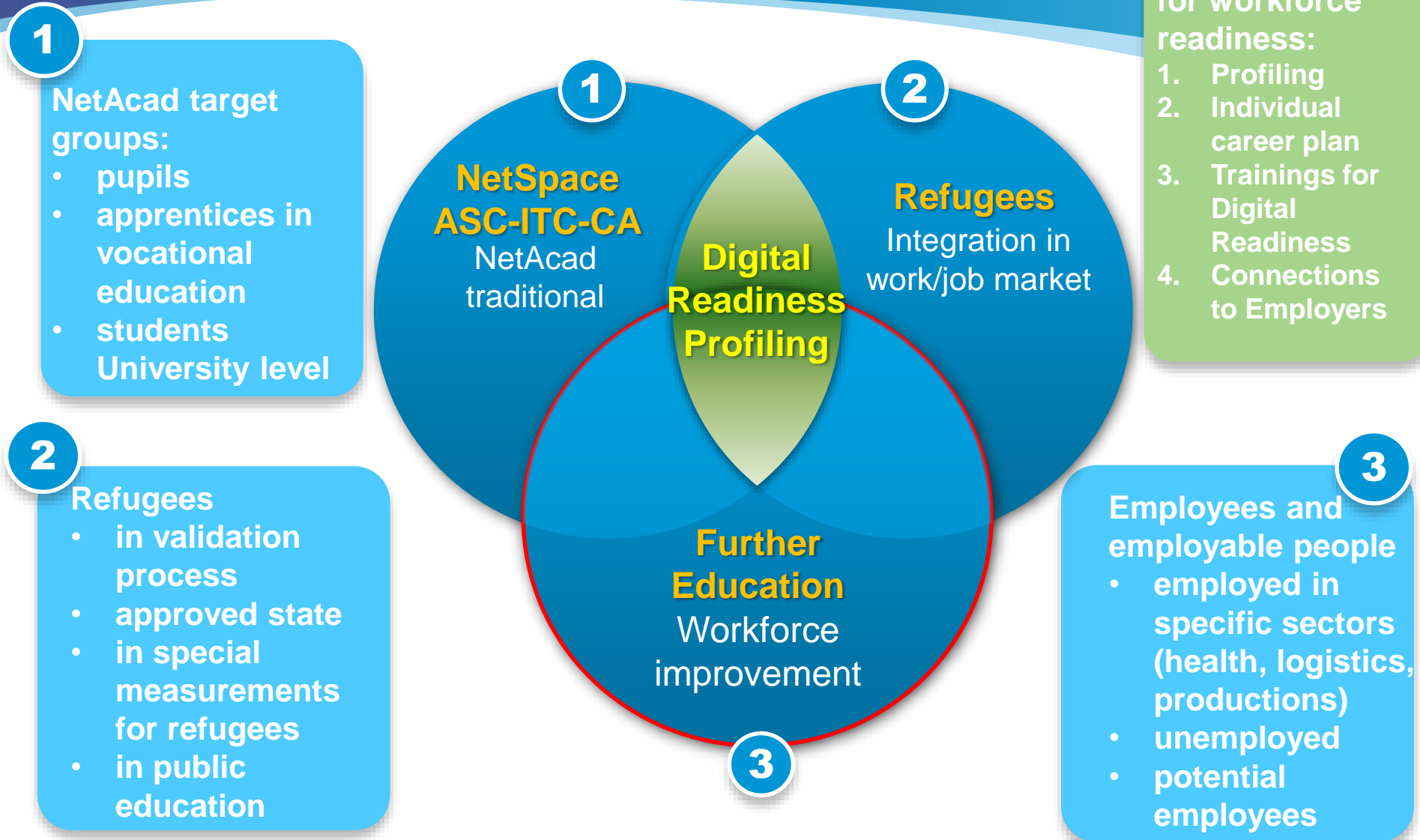
Commitment & VSEM

Competence cycle & 3 Pillars

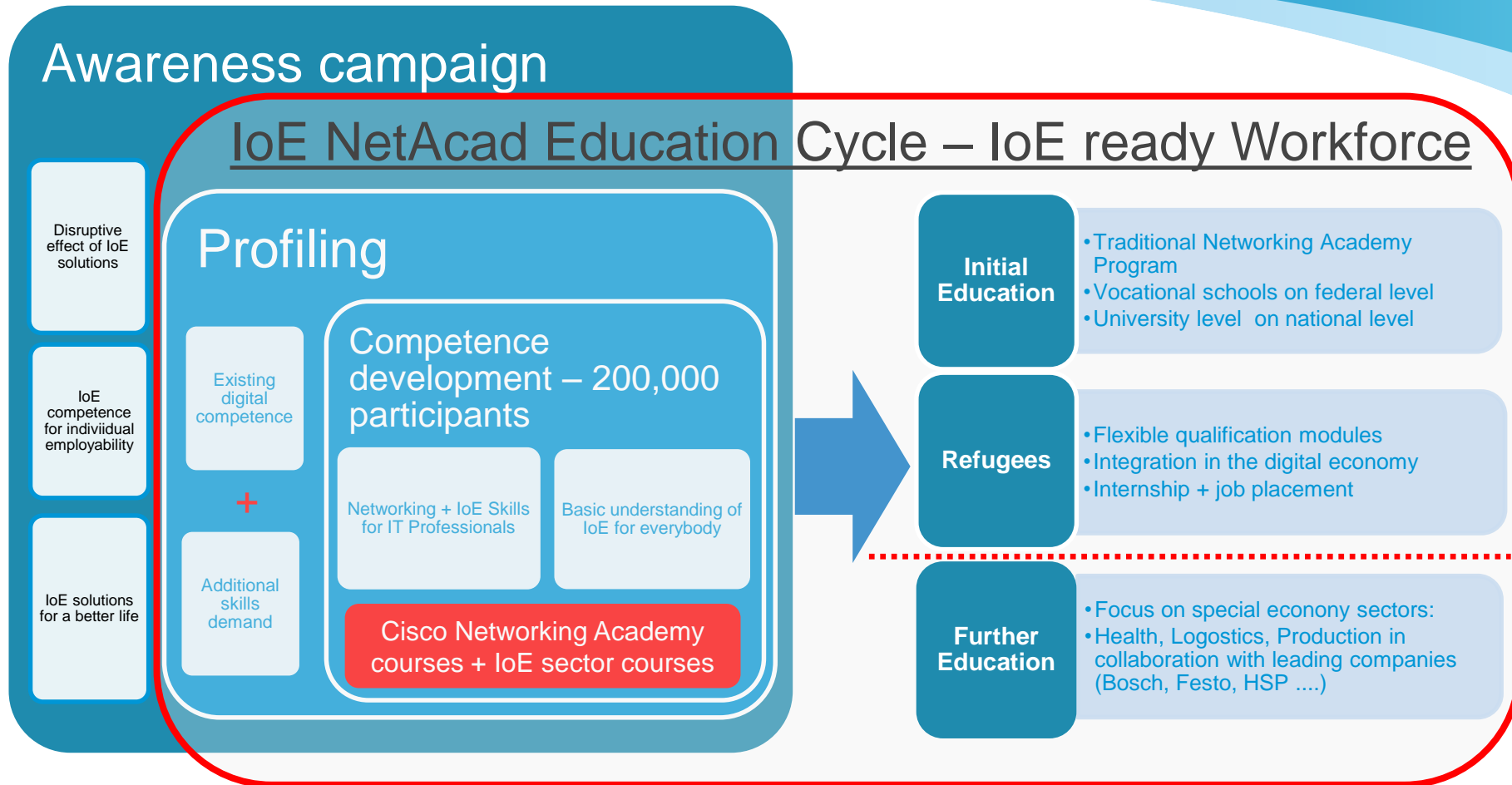
Strategy: Bringing the
nation back in

Partner ecosystem & team

Integrated Concept for Combined Approaches



Competence Cycle and Employability - Target Groups



Agenda

Commitment & VSEM

Competence cycle & 3 Pillars

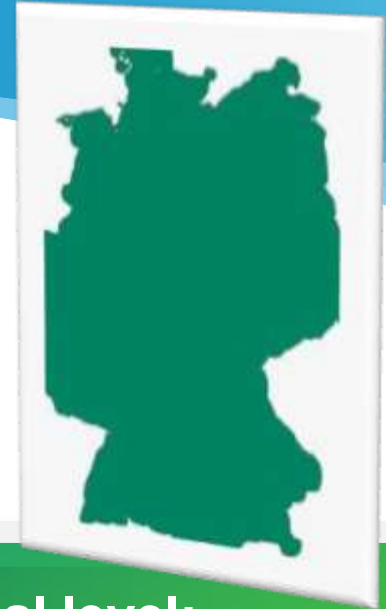
Intervention and Strategy:
Bringing the nation back in

Partner ecosystem & team

Federal and National – working on different levels for one goal

State level strategy:

- Secondary schools
- Vocational Schools (initial training in Dual System)



Strategy on National level:

- Universities
- Military (Bundeswehr)
- further education for all people in working age: employed, unemployed, employable people, refugees

Target: Digital readiness is the education level for employability ...

Institution Building on National Level

Nation **BUILDING**



Investment in NetAcad institution building on national level to cover the Academy life cycle

- Acquisition
- Onboarding
- Instructor enablement
- Sustainable structures

With CDA resources we build national institutions

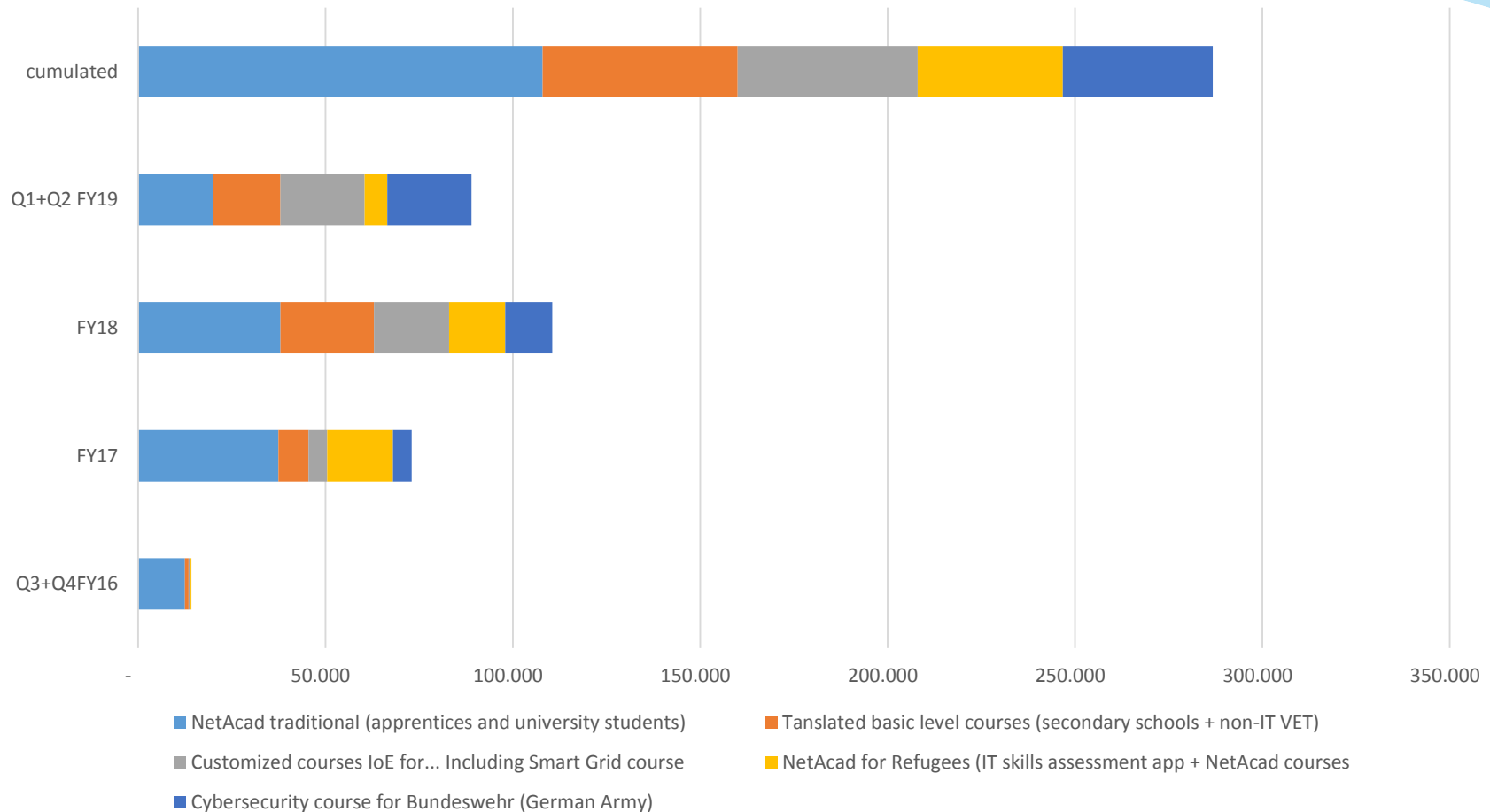
- Virtual acquisition team
- Onboarding support (bringing them home)
- ASC infrastructure
- Network of instructor trainers with a nation wide range (IT-Bildungsnetz and others)
- Multi-platform strategy with industry partners and further education partners
- Stakeholder relations with labor administration and social partners

NetAcad Students Metrics Overview

NetAcad target group	Q3+Q4FY16	FY17	FY18	Q1+Q2 FY19	cumulated
NetAcad traditional (apprentices and university students)	12.500	37.500	38.000	20.000	108.000
Tanslated basic level courses (secondary schools + non-IT VET)	1.000	8.000	25.000	18.000	52.000
Customized courses IoE for... Including Smart Grid course	500	5.000	20.000	22.500	48.000
NetAcad for Refugees (IT skills assessment app + NetAcad courses)	250	17.500	15.000	6.000	38.750
Cybersecurity course for Bundeswehr (German Army)	-	5.000	12.500	22.500	40.000
total	14.250	73.000	110.500	89.000	286.750

NetAcad Students Metrics Split

NetAcad Student Metrics Split – Courses and Target Groups



How Are We Getting There?

Strategy / Activity

Impact / Results

Entry level courses translated



50.000 additional students
(secondary schools)

Academy onboarding improved +
capacity for instructor training



From 400 to 1600 Academies +
1500 Instructors trained

IT skills assessment for Refugees



35.000 Refugee users + potential
for more users

Customized courses IoE for ...



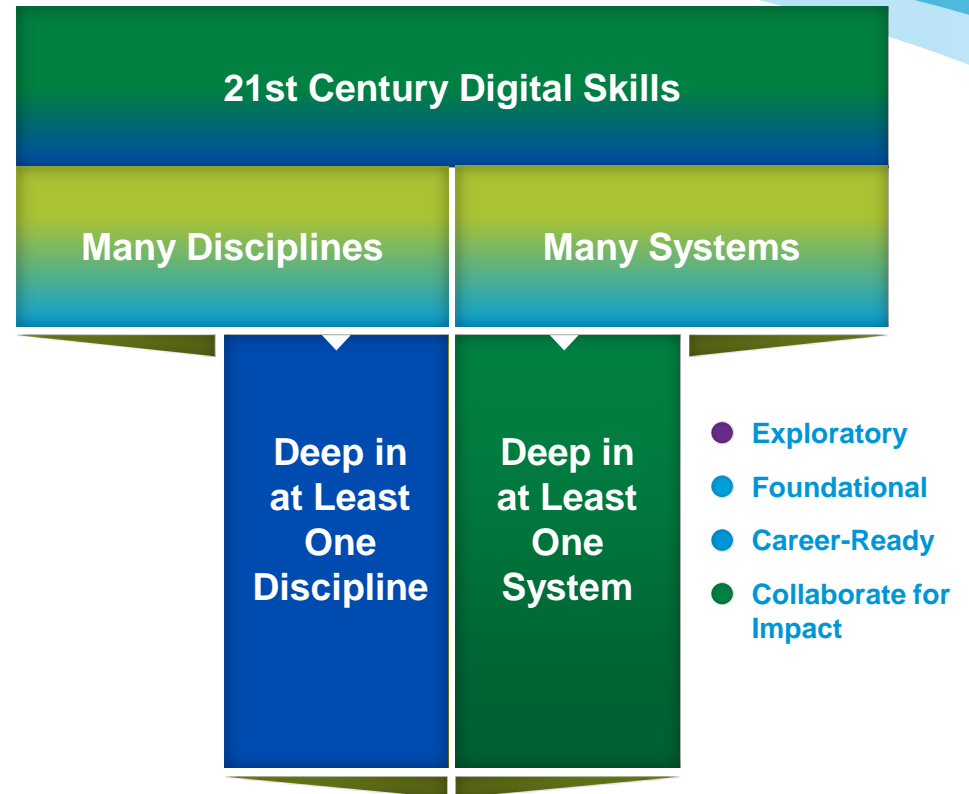
50.000 additional students non-IT
VET

CyberSecurity for German Military



40.000 Bundeswehr

The Networking Academy Learning Portfolio Approach



Cisco Networking Academy Learning Portfolio

Exploratory

Consider a Career in Technology

- Introduction to IoT
- Introduction to Cybersecurity
- Get Connected

Tutorials:

- Packet Tracer Know How
- Linux Unhatched

Series:

- Be Your Own Boss
- Career & Technical Webinars

**Skills to
Solve
Real-World
Problems**

Foundational

Prepare for a Technology Career

IT Essentials
NDG Linux Essentials
Cybersecurity Essentials*
Networking Essentials*

CPA: Programming Essentials in C++
Mobility Fundamentals
Entrepreneurship

IoT Fundamentals:
Connecting Things*
Big Data and Analytics*
Hackathon Playbook*

**Collaborate for
Impact**
*Synthesize
your skills*

- Packet Tracer
- Cisco NetRiders Competition
- Internships
- Regional IT Competitions
- Regional Hackathons

Career-Ready

Step into Your Technology Career

CCNA Routing & Switching:

- Introduction to Networks
- Routing & Switching Essentials
- Scaling Networks
- Connecting Networks

CCNP Routing & Switching:

- ROUTE
- SWITCH
- TSHOOT

CCNA Security CCNA Cyber Ops**

NDG Linux:

- Linux I
- Linux II

* Available within 6 months

**Available second half 2017

Entry Level Courses Translated

Situation and Intervention

- NetAcad team has developed entry level (exploratory) courses (between 15h and 20h) – basic competence
 - Get connected
 - Introduction to IoT
 - Introduction to Cybersecurity
 - Network Fundamentals
- Translation is the prerequisite for implementation at schools in Germany – CDA investment in year 1
- Using the newly available courses to attract new Academies + instructors
- Connection with improved onboarding process module

Results

- Short entry level courses open the Academy program for secondary schools. A completely new market segment comes in reach
- Translation process led by NetAcad product team is on track
- Release dates:
 - Get Connected: June 2016
 - Introduction to the IoE: July 2016
 - Introduction to Cybersecurity: October 2016
 - Network Fundamentals: Q3 FY17

Q3+Q4FY16	FY17	FY18	Q1+Q2 FY19	cumulated
1.000	8.000	25.000	18.000	52.000

Academy Onboarding Improved (Institution Building)

Investment and Intervention

The growth of student numbers depends on onboarding new institutions + training offers for new instructors

- Virtual acquisition team + onboarding support (bringing them home) + support infrastructure
- Forming a network of instructor trainers with a nation wide impact
- Multi-platform strategy with industry partners and further education institutions
- Stakeholder relations with Ministries, labour administration + social partners

Results

- From 1 to 4: Increasing the number of Academies from 400 to 1,600
- Instructor training for 1,500 non-IT teachers for new courses (basic level)
- Access to the basic level online courses on at least 3 partner learning platforms (Academy Cube and similar – State platforms?)
- Stakeholder relations to Ministries, Federal Labour Agency, IT Summit participation, BIBB and social partners (BDI/BDA, unions)

IT Skills Assessment + Competences for Refugees

Situation and Intervention

- Development of a skills assessment tool that will be optimized for smart phone users in language variety
 - Basic IT competence
 - Advanced basic IT competence
 - Potential for IT specialists
- Recommendations for test takers regarding further competence development and direct access to NetAcad basic courses
- Promotion campaign with BA and other stakeholders including social media campaign

Results

- Improved job profiling for 35,000 refugee job seekers
- Competence development for 35,000 refugees on three different level: Basic IT skills, advanced basic IT skills, IT specialists

IT Competent Refugees



IT Basiskompetenz:	25.000
Erweiterte Basiskompetenz:	7.500
Industriezertifikatsreife:	2.500

NetAcad for Refugees Project Status

- Federal Labour Agency contacts on board level and on working level (integration points in Northrhine-Westfalia)
- Development process for IT-skills assessment app with partner Fastlane started in May 2016 (70k investment) – planned launch: September 2016
- NGO partnerships (Refugees on Rails, ReDI School, Caritas et al.)
- Refugee integration classes at all vocational schools in Germany – number of pupils growing dramatically
- Pilot groups at existing NetAcads (Muelheim, Lingen, Hamburg, Hannover, Berlin) – tutor model and app testing



Customized courses IoE for ...

Situation / Activity

- The existing Introduction to the Internet of Everything NetAcad course contains generic learning material regarding the digitization of economy and society
- These competences prepare employees for future jobs. Positive impact on employability, participation and integration
- Making IoE content more relevant we plan to produce derivatives of the IoE course for (examples) – FY17
 - Smart Grid (available since July 2015)
 - Connected production
 - Connected health services
 - Connected logistics

Results

- Strategic partnership with commercial CDA Germany Education offers (Norbert Buening)
- Smart Grid Essentials course as a starting point – update!
- IoE derivatives courses co-developed and promoted with industry partners – Festo? Telekom? WorldSkills-Germany?
- FY17 as development and test phase
- Roll-out will start in FY18

Q3+Q4FY16	FY17	FY18	Q1+Q2 FY19	cumulated
500	5.000	20.000	22.500	48.000

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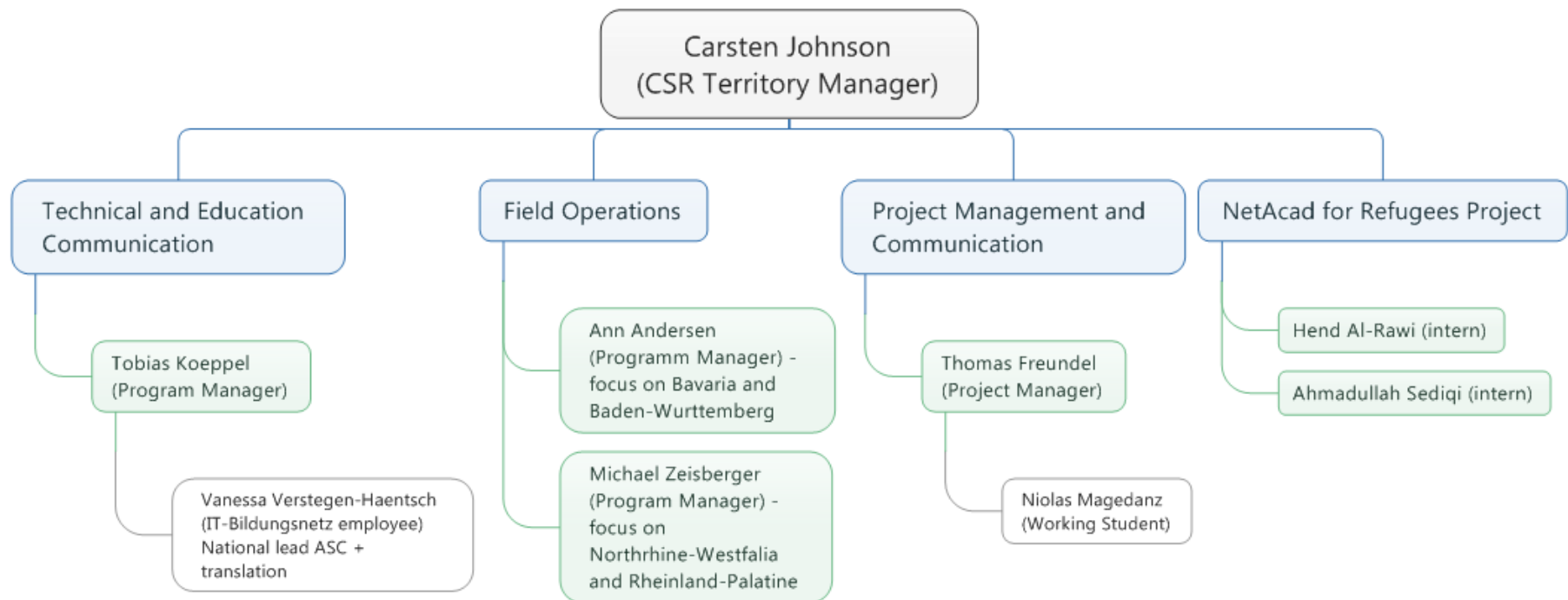
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Das Networking Academy Team



Dabei brauchen wir Eure Unterstützung:

- Macht Euch mit den neuen Kursen vertraut! Evtl. Spezialisierung?
- Stimmt euch mit den neuen NetAcad Kollegen in den Regionen ab
- Nutzt einfache Zugänge, um mehr Kollegen in die Arbeit einzubeziehen: Alle Einstiegskurse können auch ohne Instruktorentraining unterrichtet werden
- Nutzt die einfachen Zugänge für die Lernenden aus dem non-IT Bereich, um Euch zu entlasten
- Bringt die neuen Möglichkeiten in die Ministerien, die Fachkonferenzen an Schulen bzw. die Gremien der Hochschulen ein
- NetAcad Roadshow Angebote für neue Academies in Eurer Region – Ihr sagt uns, wo wir hinkommen sollen! Mein Wunsch: Mindestens 1 NetAcad Roadshow pro ASC, besser 2

Thank you.



impact^x