SBA
Research

COMET

Competence Centers for
Excellent Technologies

Two Worlds and one Reality

Approaching Security and Risk in the real and the virtual World

Die reale Welt

Durch Evolution schon Jahrtausende lange Erfahrung im Umgang mit Sicherheit und Risiken.
Bewusstsein vorhanden und Intuition nutzbar.

Die virtuelle Welt

Aus evolutionärer Sicht erst sehr wenig Erfahrung im Umgang mit Sicherheit und Risiken („Internet als Neuland“).
Bewusstsein und Intuition muss sich tw. noch ausbilden.

Distanz und physische Grenzen

Die reale Welt

Geographische Grenzen und Hindernisse. Eigenes Schutzniveau am lokal mächtigsten Angreifer ausgerichtet. Angreifer „sichtbar“ und überschaubare Anzahl.

Die virtuelle Welt

Keine Grenzen oder Beschränkungen – keine physische Nähe notwendig. Eigener Sicherheitsbedarf vom global bestem Angreifer abgeleitet. Massen von („unsichtbaren“) potentiellen Angreifern.

GRUNDSATZ I

Datenlecks und Datendiebstahl

"All the News That's Fit to Print"

The New York Times

LATE CITY EDITION
Weather: Partly cloudy, chance of showers today, tonight, tomorrow. Temp. range: today 69-83; Saturday 65-85. Temp.-Hum. Index yesterday 78. Full U.S. report on Page 111.
SECTION ONE

VOL. CXX..No. 41,413 — © 1971 The New York Times Company. — NEW YORK, SUNDAY, JUNE 13, 1971 — BQLI — 50 CENTS

Vietnam Archive: Pentagon Study Traces 3 Decades of Growing U. S. Involvement

By NEIL SHEEHAN

A massive study of how the United States went to war in Indochina, conducted by the Pentagon three years ago, demonstrates that four administrations progressively developed a sense of commitment to a non-Communist Vietnam, a readiness to fight the North to protect the South, and an ultimate frustration with this effort—to a much greater extent than their public statements acknowledged at the time.

The 3,000-page analysis, to which 4,000 pages of official documents are appended, was commissioned by Secretary of Defense Robert S. McNamara and covers the American involvement in Southeast Asia from World War II to mid-1968—the start of the peace talks in Paris after President Lyndon B. Johnson had set a limit on further military commitments and revealed his intention to retire. Most of the study and many of the appended documents have been obtained by The New York Times and will be described and presented in a series of articles beginning today.

Three pages of documentary material from the Pentagon study begin on Page 35.

Though far from a complete history, even at 2.5 million words, the study forms a great archive of government decision-making on Indochina over three decades. The study led its 30 to 40 authors and researchers to many broad conclusions and specific findings, including the following:

¶That the Truman Administration's decision to give military aid to France in her colonial war against the Communist-led Vietminh "directly involved" the United States in Vietnam and "set" the course of American policy.

¶That the Eisenhower Administration's decision to rescue a fledgling South Vietnam from a Communist takeover and attempt to undermine the new Communist regime of North Vietnam gave the Administration a "direct role in the ultimate breakdown of the Geneva settlement" for Indochina in 1954.

¶That the Kennedy Administration, though ultimately spared from major escalation decisions by the death of its leader, transformed a policy of "limited-risk gamble," which it inherited, into a "broad commitment" that left President Johnson with a choice between more war and withdrawal.

¶That the Johnson Administration, though the President was reluctant and hesitant to take the final decisions, intensified the covert warfare against North Vietnam and began planning in the spring of 1964 to wage overt war, a full year before it publicly revealed the depth of its involvement and its fear of defeat.

¶That this campaign of growing clandestine military pressure through 1964 and the expanding program of bombing North Vietnam in 1965 were begun despite the judgment of the Government's intelligence community that the measures would not cause Hanoi to cease its support of the Vietcong insurgency in the South, and that the bombing was

Continued on Page 38, Col. 1

Vast Review of War Took a Year

By HEDRICK SMITH

In June, 1967, at a time of great personal disenchantment with the Indochina war and rising frustration among his colleagues at the Pentagon, Secretary of Defense Robert S. McNamara commissioned a major study of how and why the United States had become so deeply involved in Vietnam.

The project took a year to complete and yielded a vast and highly unusual report of Government self-analysis. It was compiled by a team of 30 to 40 Government officials, civilian and military, many of whom had helped to develop or carry out the policies that they were asked to evaluate and some of whom were simultaneously active in the debates that changed the course of those policies.

While Mr. McNamara turned over his job to Clark M. Clifford, while the war reached a military peak in the 1968 Lunar [...] bombing of North Vietnam and announced his plan to retire, and while the peace talks began in Paris, the study group burrowed through Government files.

The members sought to probe American policy toward Southeast Asia from the World War II pronouncements of President Franklin D. Roosevelt into the start of Vietnam peace talks in the summer of 1968. They wrote nearly 40 book-length volumes backed up by annexes of cablegrams, memorandums, draft proposals, dissents and other documents.

Many Inconsistencies

Their report runs to more than 7,000 pages—1.5 million words of historical narratives plus a million words of documents—enough to fill a small crate.

Even so, it is not a complete or polished history. It displays many inconsistencies and lacks a single all-embracing sum- [...] mentary record, which the researchers did not supplement with personal interviews, partly because they were pressed for time.

The study emerged as a middle-echelon and official view of the war, incorporating material from the top-level files of the Defense Department into which flow papers from the White House, the State Department, the Central Intelligence Agency and the Joint Chiefs of Staff.

Some important gaps appear in the study. The researchers did not have access to the complete files of Presidents or to all the memorandums of their conversations and decisions.

Moreover, there is another important gap in the copy of the Pentagon study obtained by The New York Times: It lacks the section on the secret diplomacy of the Johnson period.

But whatever its limitations, the Pentagon's study discloses a vast amount of new informa- [...]

Tricia Nixon Takes Vows In Garden at White House

The New York Times/Mike Lien

Tricia Nixon escorted from White House by her father

By NAN ROBERTSON
Special to The New York Times

WASHINGTON, June 12—After a tension-filled delay because of rain, Tricia Nixon was married today in the Rose Garden of the White House to Edward Finch Cox, the man she has described as "my first and last love."

When the rain let up, the President's diminutive, ethereal blond daughter, who turned 25 years old last February, finally walked down the curving staircase of the columned [...] in New York with his other, younger daughter, Julie. He gave her away to Dwight David Eisenhower 2d, only grandson of the late President Eisenhower. That wedding united two of America's most celebrated political families.

The wedding this afternoon was the eighth involving a Presidential daughter at the White House.

But whether it would go off outdoors was touch-and-go [...]

CITY TO DISCLOSE BUDGETARY TRIMS FOR DEPARTMENTS

Mayor's Aides Make Decision on Final Figures Scheduled to Be Announced Today

By MAURICE CARROLL

Mayor Lindsay has summoned his supercabinet, the heads of all major city departments, to Gracie Mansion this morning to tell them the cuts that their departments face in his revised budget.

"All of them made their pitch to the Mayor within the last 48 hours," a mayoral aide said yesterday. "Sunday they get the word."

The $9.13-billion budget originally made public by the Mayor must be trimmed by a few hundred million dollars to reflect the revenue package he extracted from Albany, which provides for less than the $1.1-billion gap that Mr. Lindsay had said existed between projected income and spending.

No Details on Cuts

The Mayor's advisers were not saying precisely yesterday how much the budget would have to be cut, or where.

Key city Councilmen have been told that the Mayor would bow on one point that had been made an issue by the Council and the Board of Estimate—by agreeing to double the projected income forecast for offtrack betting to $50-million.

Deputy Mayor Richard R. Aurelio, who sat with Budget Director Edward K. Hamilton in the Mayor's office yesterday, penciling in changes in the budget message that Mr. Lindsay will make public tomorrow, said only:

"We'd have to take serious note of the Board of Estimate's and the Council's views on OTB."

But Councilmen said that they had been told privately that the higher figure would be used.

'Cushion' Is Possible

NIXON CRITICIZED AS MAYORS MEET

Housing and War Policies Attacked and Defended at Parley in Philadelphia

By MARTIN TOLCHIN
Special to The New York Times

PHILADELPHIA, June 12 — President Nixon's foreign and domestic policies were sharply criticized and at times defended today in a number of resolutions introduced at the 38th annual United States Conference of Mayors.

An afternoon of spirited debate included a heated clash over a resolution to urge the President to end the war in Vietnam, a dispute between Mayor Lindsay of New York and Mayor Joseph L. Alioto of San Francisco and a nearly [...]

U.S. URGES INDIANS AND PAKISTANIS TO USE RESTRAINT

Calls for 'Peaceful Political Accommodation' to End Crisis in East Pakistan

FIRST PUBLIC APPEAL

Statement Is Said to Reflect Fear of Warfare if Flow of Refugees Continues

By TAD SZULC
Special to The New York Times

WASHINGTON, June 12—The United States appealed today to India and Pakistan to exercise restraint and urged the Pakistanis to restore normal conditions in East Pakistan through "peaceful political accommodation."

It was the first public statement by the United States on the situation in the subcontinent since the Pakistani Army last March 25 began quelling the East Pakistani movement for autonomy and later for independence. The statement reflected the increasing concern here that hostilities may erupt between India and Pakistan if the massive movement of East Pakistani refugees into India is not halted.

5 Million Refugees

The latest figures available to the State Department indicated that more than five million refugees have crossed the borders into India. This represents more than 7 per cent of East Pakistan's population. Refugees were reported still entering India at a rate of more than 100,000 a day.

A cholera epidemic is spreading among the refugees, and the State Department announced today that three United States Air Force planes were delivering a million doses of anticholera vaccine to India. The planes are to participate [...]

ANKLAGE

Techniker soll 50 Terabyte Daten von NSA gestohlen haben

NSA - Foto: EPA

ANKLAGE

Techniker soll 50 Terabyte Daten von NSA gestohlen haben

Harold Martin wird in den USA angeklagt, weil er 50 Terabyte Daten aus NSA-Systemen gestohlen hat. Ihm drohen bis zu 200 Jahre Haft.

Die reale Welt

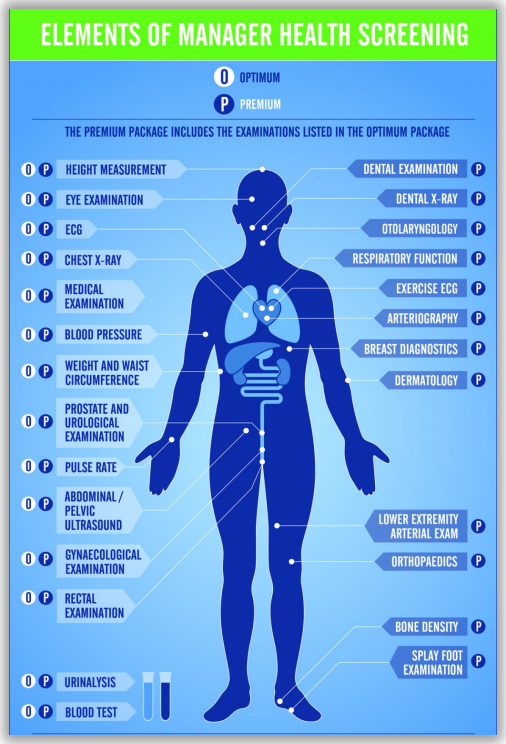
Aufwand Dokumente zu kopieren, Schwierigkeit diese zu transportieren sowie Menge Daten die gestohlen werden können durch physikalische Limitierungen begrenzt.

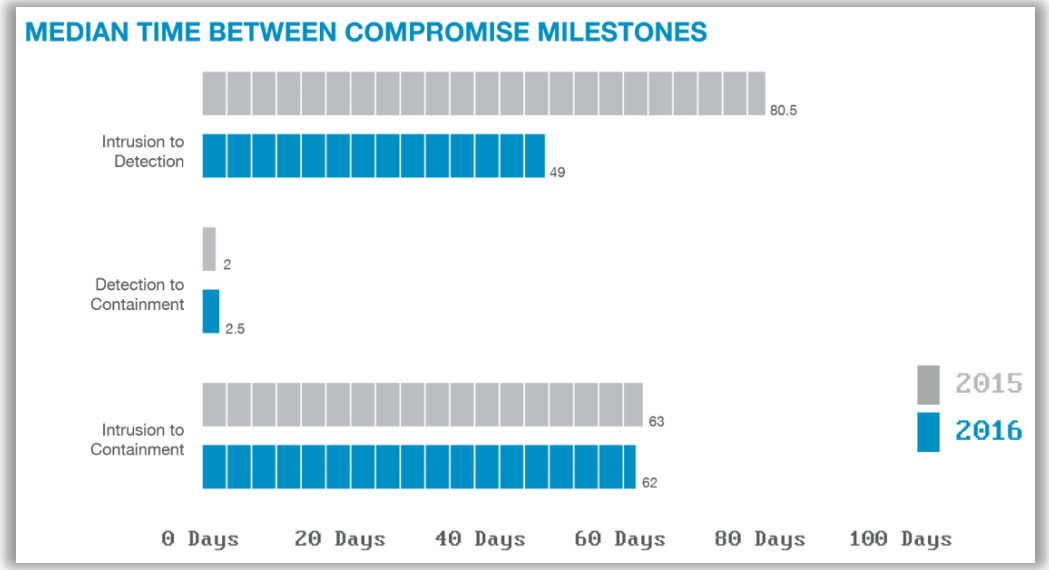
Die virtuelle Welt

Datendiebstahl skaliert viel besser. Sehr hohe Übertragungsraten, riesige Speicherdichte, kaum Grenzen in Bezug auf Datenmenge.

GRUNDSATZ II

Symptome und Problemerkennung





2017 Trustwave Global Security Report

Die reale Welt

Bei Krankheit meist Symptome erkennbar. Bewusstsein für Bedeutung Früherkennung und „Preventive Maintenance“. Insb. auch Diebstahl bzw. Einbruch offensichtlich (Gut ist weg bzw. Beschädigung sichtbar).

Die virtuelle Welt

Symptome oft schwer erkennbar, weniger greifbar bzw. präsent. Häufig keine bewusst Suche danach.
“Silent failure of prevention.”
Diebstahl (Datenkopie) ev. nie erkannt (da keine Veränderung der Daten selbst).

GRUNDSATZ III

Kriminalität und Banküberfälle

Die reale Welt

Verbrechen sind mit manuellem Aufwand verbunden, lassen sich kaum automatisieren und skalieren nicht.
Höhere psychologische Hemmschwelle.

Die virtuelle Welt

Angriffe lassen sich bei geringem manuellen Aufwand sehr gut automatisieren und skalieren.
Leichter Einstieg (CaaS).
Distanz zwischen Täter und Opfer verringert Hemmschwelle.

GRUNDSATZ IV

Forensik und Spurensicherung

Die reale Welt

Locard'sche Prinzip – zwischen dem Täter und dem Tatort bzw. Opfer findet unvermeidlichen ein Austausch von Spuren statt

Die virtuelle Welt

Weniger „harte" Beweise. Täuschung und verbreiteter Einsatz Anonymisierungstools.
Attribution von Angriffen als schwierige Herausforderung.
False Flag Operationen.

GRUNDSATZ V

Gerichtsbarkeit und Verbrechensbekämpfung

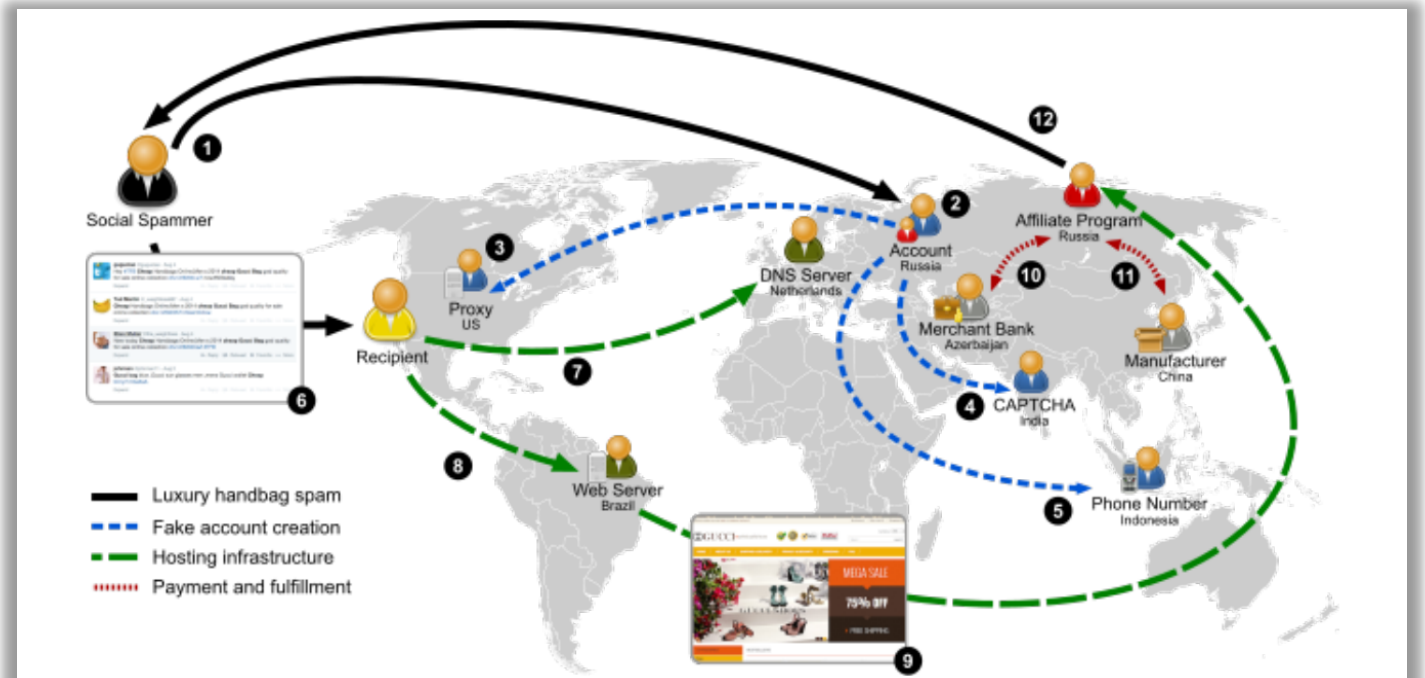


Figure 1: Specialized roles in the underground economy that underpin extracting wealth from victims. This represents just a single abuse monetization value chain to serve as a motivating example.

Framing Dependencies Introduced by Underground Commoditization

Die reale Welt

Jahrhundertelange Erfahrung und Praxis in Bezug auf Gerichtsbarkeit und Strafverfolgung. Anzuwendendes Recht meist relativ klar (richtet sich nach Ort der Straftat).

Die virtuelle Welt

Schnelle Entwicklungen wodurch Recht als behäbig wahrgenommen wird. Gerichtsbarkeit und Strafverfolgung komplex da sehr oft unterschiedliche Rechtssysteme betroffen.

GRUNDSATZ VI

Zentralisierung und Vernetzung

http://blog.wolfram.com/2014/11/04/modeling-a-pandemic-like-ebola-with-the-wolfram-language/

Zentralisierung und Vernetzung

https://www.symantec.com/blogs/threat-intelligence/wannacry-ransomware-attack

Die reale Welt

Insb. in Wirtschaft Konzentration und Zentralisation verbreitet um Effizienz zu steigern und Redundanzen abzubauen.
Führt zu Verletzbarkeit und „Too big to fail“.

Die virtuelle Welt

Sehr hoher Vernetzungsgrad und hohe (oft versteckte) Abhängigkeit von wenigen kritischen „Systemelementen“ (SW Hersteller, CDNs, DNS, IXPs etc.).

GRUNDSATZ VII

Monokulturen und Verletzbarkeit

Pilz bedroht beliebte Frucht

Bananen vor dem Aussterben

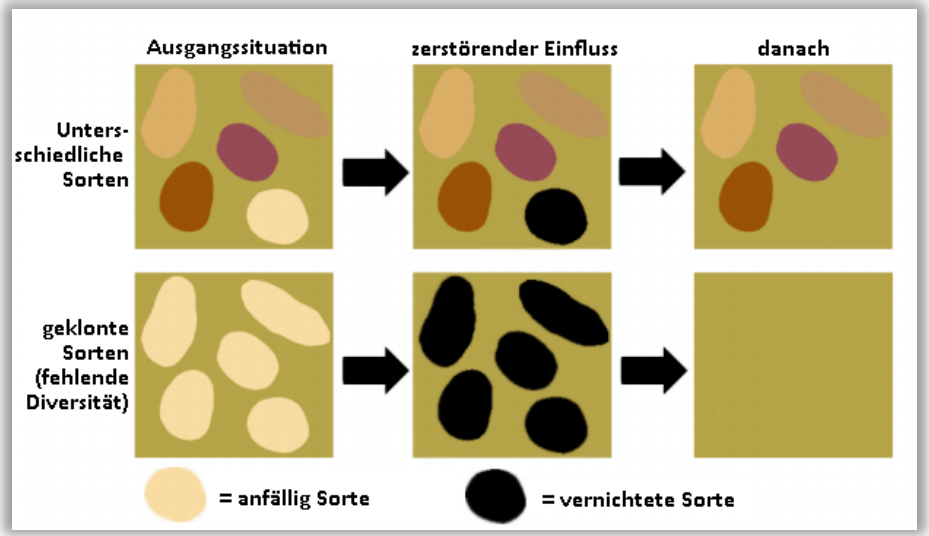
Die nach dem Apfel beliebteste Frucht der Deutschen, die Banane, ist wegen einer Pilzkrankheit vom Aussterben bedroht. Denn Monokulturen sind besonders anfällig für Epidemien. Können Forscher die Katastrophe noch abwenden?

Naht das Leben ohne Bananen?

(Foto: dpa)

Cyber*In*security: The Cost of Monopoly

How the Dominance of Microsoft's Products Poses a Risk to Security



http://www.herbert.saurugg.net/vernetzung-komplexitaet/too-big-to-fail

Die reale Welt

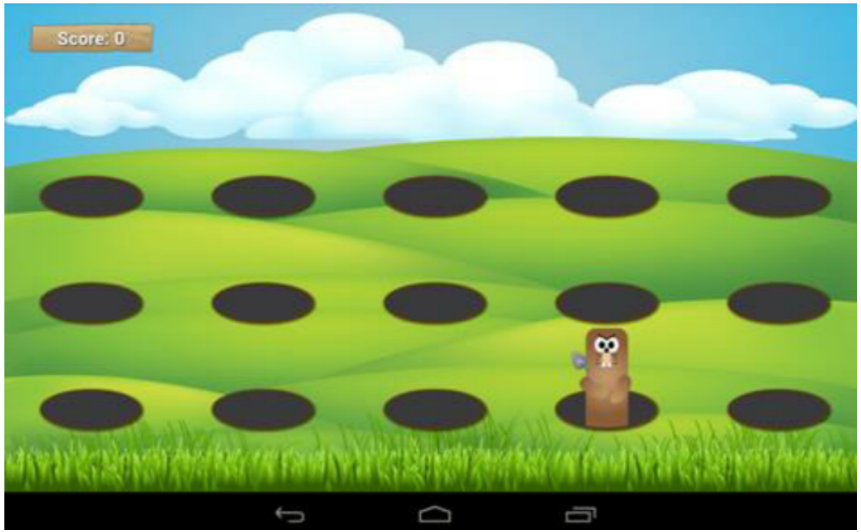
Monokulturen als reales Problem. Teilweise Lösungsansätze und Gegentrends erkennbar (Diversität, Artenvielfalt, Bio, Wettbewerbsrecht etc.).

Die virtuelle Welt

Monokulturen insbesondere durch Vernetzung, Geschwindigkeit und Automatisierungsgrad besonders gefährlich. Gesamtgesellschaftlich erhöhte Verletzbarkeit und verringerte Widerstandsfähigkeit.

GRUNDSATZ VIII

Proaktives Infosec-Management Programm



Two Worlds and one Reality – Fazit

Unterschiedliche Rahmenbedingungen in Bezug auf Sicherheit und Risiken zwischen realer und virtuellen Welt

- **Reale Welt**: Evolutionäre Erfahrung, entwickeltes Bewusstsein und Intuition
- **Virtuelle Welt**: „Neuland“, viele Besonderheiten und Herausforderungen – keine geographischen Beschränkungen, Geschwindigkeit, Skalierung, Automatisierung, fehlende Symptome, Beweissicherung, Gerichtsbarkeit …

Unserer **Realität** entsteht durch die **Verschmelzung beider Welten**

- Notwendigkeit beim Umgang mit Risiken und Sicherheit **beide Welten** und deren **Besonderheiten** zu **berücksichtigen**
- Bedeutung eines **proaktiven Infosec-Management Programms** sowie Entwicklung **Fähigkeiten zur schneller Reaktion**

COMET

Competence Centers for
Excellent Technologies

Philipp Reisinger

SBA Research gGmbH

Favoritenstraße 16, 1040 Wien

+43 660 543 62 74

Preisinger@sba-research.org

bmvit Bundesministerium für Verkehr, Innovation und Technologie

bmwfw Bundesministerium für Wissenschaft, Forschung und Wirtschaft

FFG

wirtschaftsagentur wien Ein Fonds der Stadt Wien

FWF

Christian Doppler Forschungsgesellschaft

netidee powerful innovations