

Value Configuration in Higher Education - Theoretical Development and
Empirical Case Study

Dissertation

zur Erlangung des Grades eines Doktors der Wirtschaftswissenschaft
der Rechts- und Wirtschaftswissenschaftlichen Fakultät
der Universität Bayreuth

vorgelegt

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07.10.2019

Vorwort

Die Herausforderungen, denen sich Universitäten im digitalen Zeitalter gegenüber sehen, verlangen nach einem strategischen Universitätsmanagement, das sich an allen Stakeholdern einer modernen Universität orientiert. Die Zielsetzung des Universitätsmanagement muss dabei Wertkonfigurationen in den Blick nehmen, die sich aus dem Zusammenwirken aller Akteure ergeben. In der vorliegenden Dissertation zur Erlangung des Grades eines Doktors der Wirtschaftswissenschaften der Rechts- und Wirtschaftswissenschaftlichen Fakultät der Universität Bayreuth befasst sich Herr Doktor Wawrzinek mit diesem höchst aktuellen und zugleich für das Nonprofit-Marketing grundlegenden, wenngleich noch wenig erforschten Thema: Er untersucht, wie diese Wertkonfigurationen im Universitätskontext entstehen, und wie diese gesteuert werden können. Mit der Wahl von Hochschulen als Untersuchungsobjekt hat Herr Doktor Wawrzinek einen Servicekontext für seine Arbeit gewählt, der durch eine hohe Komplexität und eine oft noch geringe Professionalisierung der Managementprozesse geprägt ist. Der Arbeit kommt daher in gleich mehrerer Hinsicht Bedeutung zu: Zunächst ist zu konstatieren, dass der Wissensstand über die Ko-Kreation von Werten im Hochschulsektor noch gering ist. Hinzu kommt, dass es an wissenschaftlich fundierten Empfehlungen fehlt, wie diese Wertnetzwerke im Hochschulmanagement beispielsweise durch Universitätpräsidentinnen und Universitätspräsidenten gesteuert werden können. In diese Lücken stößt diese Arbeit vor.

Herr Doktor Wawrzinek hat mit dieser Schrift eine Arbeit vorgelegt, die ein aktuelles Thema aufgreift und die nicht nur neuartige Erkenntnisse zum strategischen Hochschulmarketing und Hochschulmanagement liefert, sondern auch neue Formen der Visualisierung der Strategiemodelle einführt. Besonders positiv kann sein Ansatz gewertet werden, im dritten Beitrag auch empirische Daten zu nutzen, um den Anwendungsbezug der Befunde zu erhöhen. Hier kann hervorgehoben werden, dass er erstmals empirische Befunde aus Interviews mit Studierenden in MBA-Programmen mit den Einsichten aus Interviews mit Universitätpräsidentinnen und Universitätspräsidenten zusammenführt. Ein Schwerpunkt der Präsentation seiner empirischen Befunde sind die innovativen Strategiekartierungen, die einen wichtigen Fortschritt in der Forschung darstellen: Herr Doktor Wawrzinek unternimmt es, sich der Herausforderung zu stellen, eine Mesoperspektive zu entwickeln. Dabei gelingt es ihm, eine überzeugende Balance zwischen der abstrakten Sicht der SDL und der anwendungsorientierten Sicht des Mappings zu finden, was sich daran zeigt, dass er auch seine sehr konkreten

Empfehlungen wie zum Beispiel die Einführung kompetenzorientierter Prüfungen, deren Rahmen sich an den Werten orientieren, gut nachvollziehbar einbetten kann.

Zusammenfassend ist festzuhalten, dass die Dissertation, die Herr Doktor Wawrzinek vorgelegt hat, eine besonders gelungene wissenschaftliche Arbeit ist. Er hat mit seiner Dissertation überzeugend dargelegt, dass er zu sehr guten eigenständigen akademischen Leistungen auf dem Gebiet des Marketings und des Hochschulmanagements in der Lage ist. Dabei ist hervorzuheben, dass sich Herr Doktor Wawrzinek in dieser Arbeit an drei Forschungsprojekte herangewagt hat, deren Erfolg bei ihrem Beginn keineswegs abzusehen war, weil die dahinter liegenden Fragestellungen auf dem von ihm gewählten theoretischen Abstraktionsniveau vorher noch nicht betrachtet wurden. Mit dem Anspruch an die konsequente Nutzung der SDL als übergeordneter Theorie hat sich Herr Doktor Wawrzinek Schwierigkeiten gestellt, die in engeren Forschungslücken platzierte Arbeiten nicht kämpfen müssen. Gerade auch in Verbindung mit der grafischen Darstellung der Befunde zu Wertnetzen und Strategiekonfigurationen stellt diese Arbeit eine besonders wertvolle Leistung dar. Sie sei nicht nur Wissenschaftlerinnen und Wissenschaftlern auf dem Gebiet des Hochschulmanagements, sondern auch Entscheiderinnen und Entscheidern in Hochschulen zur Lektüre ans Herz gelegt. Es war mir eine Ehre, zusammen mit Herrn Kollegen Ellert diese Dissertation begleiten zu dürfen – dieser inspirierende gemeinsame Weg hat auch meine Vorstellung von Hochschulmanagement geformt.

Bayreuth, im Oktober 2019

Prof. Dr. Claas Christian Germelmann

Danksagungen

„I'm thankful for every moment“
Al Green

Der an der Rechts- und Wirtschaftswissenschaftlichen Fakultät der Universität Bayreuth eingereichte Arbeitstitel dieser semi-kumulativen Dissertation lautet „Value Configuration in Higher Education - Theoretical Development and Empirical Case Study“ und umfasst insgesamt drei, in englischer Sprache verfasste Publikationen. Im Juli 2014 wurde dazu eine Betreuungsvereinbarung mit den Professoren Claas Christian Germelmann (Lehrstuhl für BWL III: Marketing & Konsumentenverhalten an der Universität Bayreuth) und Guido Ellert (Business School der Macromedia University of Applied Sciences München) geschlossen, denen ich gleich zu Beginn herzlich danken möchte. Als meine akademischen Lehrer und Vorbilder haben sie mich über viele Jahre hinweg auf meinem Weg begleitet, beraten, gefördert und gefordert. Ihre Erfahrungen und Ratschläge, die konstruktive Kritik, aber auch die aufmunternden Worte und Ermutigungen, wenn sie sich mal als nötig erwiesen, waren dabei von unschätzbarem Wert für diese Dissertation und meine persönliche Entwicklung. Dass eine berufsbegleitende Promotion kein leichtes Unterfangen und zudem eine mehrere Jahre andauernde Herausforderung mit Höhen und Tiefen ist, war mir stets bewusst. Ohne die entsprechende Betreuung mit dem „gewissen Etwas“, nämlich gelebter Menschlichkeit, wäre diese Reise mit Sicherheit nicht so erfolgreich verlaufen.

Für die Unterstützung in dieser so lehrreichen und spannenden Phase meines Lebens, die Geduld, die Möglichkeit über mich selbst hinauswachsen zu können und nicht zuletzt dafür, dass sie an meine Ideen geglaubt haben, gebührt Prof. Dr. Guido Ellert und Prof. Dr. Claas Christian Germelmann meine tiefste Dankbarkeit.

Ebenfalls danken möchte ich einer ganzen Reihe an Personen, die mich in dieser Zeit stets unterstützt haben, mir mit Rat und Tat zu Seite standen und wertvolle Denkanstöße gaben. Dazu zählen allen voran Prof. Dr. Herbert Woratschek, Dr. Guido Schafmeister, die TeilnehmerInnen der Doktorandenseminare in Pottenstein und Stefan Tselegidis.

Ein besonderer Dank gilt der leider vor kurzem verstorbenen Münchener Pianistin Gertrud Firnkees, die mich seit meinem sechsten Lebensjahr bis zuletzt durch die wunderbare Welt der klassischen Musik geführt und mir damit zu einer schöpferischen und unerschöpflichen Kraftquelle während der Anfertigung dieser Dissertation verholfen hat.

Nicht zu vergessen sind all die Freunde und Musikerkollegen, mit denen ich immer noch in Kontakt stehe, obwohl ich sie wegen meiner Promotionsprojekte so manches Mal versetzt habe.

Vor allem aber möchte ich meiner Familie, meinem Vater Hubert Wawrzinek, meiner Mutter Dr./Univ. Budapest Margit Wawrzinek, meinen Großeltern in Ungarn, Zoltán und Júlia Ruhig, sowie meinen verstorbenen Großeltern Maria und Josef Wawrzinek von ganzem Herzen danken. Ihr habt mich mit starken Wurzeln ausgestattet und mir liebevoll Werte vermittelt, die mir bis heute Orientierung geben. Ohne Euch wäre meine bisherige akademische Laufbahn nicht möglich gewesen. Danke, dass Ihr immer für mich da wart und seid!

David Wawrzinek

Zusammenfassung

Diese an der Rechts- und Wirtschaftswissenschaftlichen Fakultät der Universität Bayreuth angemeldete, semi-kumulative Dissertation trägt den Titel „Value Configuration in Higher Education - Theoretical Development and Empirical Case Study“. Sie setzt sich aus insgesamt drei, in englischer Sprache verfassten Einzelbeiträgen und der nachfolgenden Klammer zusammen.

Die erste internationale Publikation im *Athens Journal of Education* mit dem Titel „Value Configuration in Higher Education – Intermediate Tool Development for Teaching in Complex Uncertain Environments and Developing a Higher Education Value Framework“ ist ein Conceptual Paper. Es befasst sich mit der Frage nach der Wertschöpfung in Higher Education und präsentiert eine alternative, in der Higher Education-Forschung weitgehend unbekanntes theoretische Perspektive als Fundament und Denkraum durch die Adaption der Service-Dominant Logic (SD-logic). Das in diesem Beitrag entwickelte Higher Education Value Framework bietet darüber hinaus eine geeignete Strukturierungs- und Analysemöglichkeit für Hochschulphänomene und hilft dabei, die Wertschöpfung in Higher Education neu zu betrachten.

Die zweite Publikation im *Journal of Education and Development* ist ebenfalls ein Conceptual Paper. Es bietet durch das Higher Education Strategy Model (HESM) ein strategisches Tool für Hochschulentscheider zur Visualisierung des Systems Higher Education. Dieses Modell ermöglicht ein holistisches Verständnis und befasst sich zudem mit der grundlegenden Frage nach dem Ziel und Zweck von Hochschulbildung. Den Higher Education-Entscheidern wird, unabhängig von der Studienrichtung, eine Navigations- und Orientierungshilfe in einer immer komplexeren, internationaleren und digitaleren Hochschullandschaft zur Verfügung gestellt. Dies wird durch die Entwicklung von vier übergeordneten strategischen Zielen von Higher Education und deren Integration in das Strategiemodell ermöglicht.

Nach dieser sehr allgemeinen und systemischen Betrachtungsweise von Higher Education werden im dritten und letzten Beitrag dieser Dissertation die vorangegangenen Erkenntnisse genutzt. Dies soll dazu dienen, einen anwendungsorientierten, interdisziplinären Ansatz im spezifischen Kontext der Executive Education zu verfolgen.

Das Ziel des finalen, qualitativ-empirischen Beitrags mit dem Titel „Mapping the Logic of Value in Higher Education - A Theoretical Adaption of Service-Dominant Logic and an Empirical Case Study in the Context of Executive Education“ bestand darin, eine Executive Education Strategy Map (EESM) für Hochschulentscheider zu entwickeln.

Diese ist sowohl Überblicks-, Planungs- und Steuerungstool, als auch Grundlage für die Entwicklung eines hochwertigen Kennzahlensystems in weiterführenden, zukünftigen Forschungsprojekten.

Die EESM visualisiert die als Serviceplattform betrachtete Executive Education und gibt durch die Darstellung relevanter Ursache-Wirkungszusammenhänge auf modifizierten Ebenen Aufschluss über die Ziele von Studierenden. Letztere beziehen sich auf deren Zufriedenheit von der ersten Information über ein Studienangebot bis hin zum Studienabschluss und sogar darüber hinaus. Zusätzlich integriert die EESM die in ExpertInneninterviews erhobenen Perspektiven von UniversitätspräsidentInnen hinsichtlich strategisch relevanter Kennzahlen für das Management von Higher Education Institutions (HEI).

Beiträge zum strategischen Management von HEI sind angesichts erhöhter Komplexität aufgrund aktueller sowie zukünftiger technologischer und sozialer Entwicklungen von besonderer Relevanz und Dringlichkeit. Diese Dissertation leistet diesbezüglich einen wichtigen Beitrag, indem sie auf theoretisch-konzeptionellem, wie auch empirischem Wege strategische Management-Tools und Modelle für ein holistisches Systemverständnis und zur Komplexitätsreduktion entwickelt. Somit liefert sie eine neue Analysegrundlage für Higher Education-Phänomene und erleichtert das Verständnis von Zusammenhängen und Zielen der wichtigsten Hochschulbildungsakteure.

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Abkürzungsverzeichnis

Abb.	Abbildung
EESM	Executive Education Strategy Map
FG	Fokusgruppe
HE	Higher Education
HEI	Higher Education Institution(s)
HESM	Higher Education Strategy Model
Nr.	Nummer
OECD	Organisation for Economic Co-operation and Development
S.	Seite
S4	Student Nr. 4
SD-logic	Service-Dominant Logic
Tab.	Tabelle
vgl.	vergleiche
z.B.	zum Beispiel

1. Einleitung

Der übergeordnete Titel dieser semi-kumulativen Dissertation lautet „Value Configuration in Higher Education - Theoretical Development and Empirical Case Study“. Sie setzt sich aus insgesamt drei Beiträgen, von denen zwei zum Zeitpunkt der Erstellung dieser einleitenden Worte bereits als Conceptual Paper publiziert sind, zusammen. Die finale empirische Case Study wurde als sogenanntes White Paper eingereicht und soll ebenfalls in einem Fachjournal veröffentlicht werden. Den Abschluss und gleichzeitig Rahmen der Dissertation bildet die nachfolgende Klammer, in der alle Beiträge und deren wichtigste Ergebnisse chronologisch zusammengefasst werden.

Eine der Hauptantriebskräfte für das Streben nach Erkenntnis in der Wissenschaft ist die Neugier. Zu Beginn eines jeden Forschungsvorhabens stehen in der Regel Fragen, auf die Antworten gesucht werden. Letztere wiederum führen zu zahlreichen neuen Folgefragen und Vermutungen, aus diesen ein nicht endender Kreislauf der Erkenntnissuche resultiert. Dabei ist sozusagen sicher, dass nichts sicher ist – oder, um es mit den Worten Poppers (2009) auszudrücken: „Unsere Vermutungen...können durch Überprüfung niemals positiv gerechtfertigt werden: man kann weder ihre Wahrheit sicherstellen noch ihre ‚Wahrscheinlichkeit‘...“ (S. 13). Den Auftakt dieser Dissertation bildeten ebenfalls Fragen und Vermutungen, genauer gesagt bezüglich der Optimierung von Unterrichtsmethoden an Universitäten. Der Autor dieser Arbeit wurde im Jahr 2014 als Wissenschaftlicher Mitarbeiter im Studiengang Medienmanagement an der Hochschule Macromedia in München Teil eines Forscherteams. Dessen Erfahrungen und Beobachtungen zeigten, dass der empirische Forschungsprozess als wichtiger Bestandteil eines jeden sozialwissenschaftlichen Studiums durch hohe Komplexität und eine Vielzahl zu lösender Probleme gekennzeichnet ist. Dieser Umstand veranlasste infolgedessen die Professoren Claas Christian Germelmann (Universität Bayreuth), Guido Ellert (Hochschule Macromedia) und Dr. Guido Schafmeister (damals Professor an der Hochschule Macromedia), ein hochschuldidaktisches Tool – die Empirical Research Map – zu entwickeln. Das Ziel dessen war es, Studierenden und Wissenschaftlern Entscheidungen, Problemlösungen sowie das Management von Unsicherheiten im empirischen Forschungsprozess anhand einer holistischen Visualisierung zu erleichtern.

Mittels einer gemeinsamen Publikation in „WiSt - Wirtschaftswissenschaftliches Studium“ (2014) wurde die Empirical Research Map der deutschsprachigen Leserschaft erstmalig vorgestellt. Im Anschluss folgte ein Website-Projekt in englischer Sprache, um auch ein internationales Publikum zu erreichen. Ebenfalls wurden Vorträge auf der

Conference of the International Consortium for Educational Development 2014 in Stockholm und auf der 3rd Dubai International Conference in Higher Education genutzt, um ein aussagekräftiges Feedback der internationalen Higher Education Community zu erhalten. Die Empirical Research Map wurde enthusiastisch aufgenommen, in Dubai erhielt der Autor für einen Vortrag an der Michigan State University die Auszeichnung „Best paper presentation“-Award.

Die Resonanz auf den HE-Fachkonferenzen hat gezeigt, dass der Bedarf nach didaktisch sinnvollen Komplexitätsreduktions- und Managementtools groß ist. Aus diesem Grund beschloss der Autor, an diesem Punkt anzuknüpfen und seine Forschung diesbezüglich zu intensivieren. Eine wichtige Erkenntnis nach zahlreichen Gesprächen und Diskussionen mit international renommierten HE-ExpertInnen sowie anschließender Literaturrecherche war die in der HE-Community unzureichend stattfindende Auseinandersetzung mit dem Thema Wertschöpfung und strategischen Komponenten bezüglich der Steuerung von Higher Education Institutionen (HEI). Dieser Umstand ist unter anderem mit der in der Hochschulpädagogik teilweise nur widerwillig akzeptierten Annahme und Berücksichtigung einer betriebswirtschaftlichen Perspektive sowie einer häufig vorherrschenden Kritik bezüglich der Ökonomisierungstendenzen innerhalb der Hochschullandschaft zu erklären. Ein Großteil der Konferenzvorträge und Journalbeiträge, welche der Autor besuchte sowie recherchierte, bezogen sich auf sehr spezifische und operative Themenschwerpunkte. Auffällig war dabei das Fehlen von Ansätzen, die ein holistisches Systemverständnis ermöglichen und zudem Antworten auf strategische Fragen bieten. Letztere beziehen sich auf eine Zunahme von Komplexität sowie einen wachsenden Wettbewerbs- und Konkurrenzdruck – beispielsweise infolge von Internationalisierung und Globalisierung, denen sich Universitäten ohnehin nicht entziehen können. Ermutigt durch das Feedback der HE-Community beschloss der Autor, diesen als „weißen Fleck“ zu bezeichnenden Themenbereich zu besetzen und zunächst eine geeignete Theorielogik für Higher Education (HE) zu entwickeln. Ziel ist es dabei, eine Logik zu schaffen, die es vermag, das Verständnis und die Systematisierung von HE-Phänomenen und Wertschöpfung zu schärfen. Ebenso soll sie dabei helfen, geeignete Tools und Modelle für die Reduktion von Komplexität im strategischen Management von HEI zu entwickeln. Nachfolgend soll dieser Weg, von der ersten theoretischen Fundierung hin zur konkreten Entwicklung solcher Tools und Modelle, zusammengefasst in einer chronologischen Aufarbeitung der Publikationen beschrieben werden. Im Appendix sind alle Publikationen vollständig beigefügt.

2. Publikationschronologie

2.1 ZUSAMMENFASSUNG PUBLIKATION 1

Wawrzinek, D., Ellert, G., & Germelmann, C. C. (2017). Value Configuration in Higher Education – Intermediate Tool Development for Teaching in Complex Uncertain Environments and Developing a Higher Education Value Framework. *Athens Journal of Education*, 4(3), 271-291.

Die erste internationale Publikation im *Athens Journal of Education* ist ein Conceptual Paper. Es befasst sich mit der Frage nach der Wertschöpfung in HE und präsentiert eine alternative, in diesem Forschungsbereich weitgehend unbekanntes theoretische Perspektive als Denkrahmen durch die Integration und Adaption der Service-Dominant Logic (SD-logic) (Vargo & Lusch, 2004). Neben der erneuten Vorstellung der Empirical Research Map als didaktisches Tool zur Komplexitätsreduktion wird als Schwerpunkt ein Higher Education Value Framework entwickelt.

Dieses besteht aus zehn grundlegenden Prämissen, die es ermöglichen, ein besseres Verständnis von Wertschöpfungsphänomenen in HE zu schaffen. Die Konzeption der Service-Dominant Logic markiert Woratschek, Horbel und Popp (2015) zufolge einen „Wendepunkt in der Betrachtungsweise des Kerns des ökonomischen Austauschs“ (S. 11). Die SD-logic bietet einen geeigneten theoretischen Metarahmen, welcher auf verschiedene Kontexte, in diesem Fall HE, übertragen werden kann: „Service wird ... als angewandtes Wissen (Fähigkeiten, Kenntnisse, Kompetenzen) definiert, welches im Kern des ökonomischen Austauschs steht“ (Woratschek, Horbel, & Popp, 2015, S. 11). Services (Plural) hingegen bezeichnen in der SD-logic herkömmliche Dienstleistungen. Vargo, Lusch und Akaka (2010) formulieren es wie folgt: „SD-logic establishes an alternative perspective for investigating exchange, which focuses on service - the application of competences for the benefit of another - as the central process for value creation“ (S. 137).

Es ist ebenso möglich, HE als Service (Singular) zu betrachten: Wert wird kollaborativ in bzw. aus einem komplexen Netzwerk unterschiedlicher Akteure generiert. Zu Letzteren zählen Dozierende, Studierende oder Universitätsverwaltungsangestellte innerhalb der universitären Infrastruktur, welcher beispielsweise Unterrichtsräume zugeordnet werden können. Dieser kollaborative Prozess des Zustandekommens von Wert durch die Netzwerkteilnehmer wird als „Co-Creation“ (Vargo & Lusch, 2008, S.2; Woratschek, Horbel, & Popp, 2015, S. 12) bezeichnet.

Ebenfalls wichtig für die theoretische Einordnung in diesem Beitrag ist eine genaue Betrachtung der Wertschöpfungskonfigurationen unter Berücksichtigung der

beschriebenen SD-logic. Die Wertschöpfungskonfigurationen Value Chain, Value Network und Value Shop eignen sich dazu, abzubilden, „in welcher Art und Weise im Rahmen der Leistungserstellung Wert generiert wird“ (Popp, Horbel, & Woratschek, 2017, S. 508).

Die Berücksichtigung der SD-logic und des Co-Creation-Paradigmas verlangt allerdings eine Neubetrachtung der Wertschöpfungskonfigurationen Wertkette, Wertnetz und Wertshop, da etablierte Wertschöpfungskonfigurationen wie die Wertkette zu anbieterzentriert sind und Kunden als Co-Creators vernachlässigen (Popp, Horbel, & Woratschek, 2017, S. 508): „Aus Sicht der Service-Dominant Logic ... entsteht der Wert für den Kunden jedoch erst durch die Integration der Wertvorschläge, sog. Value Propositions, anderer an der Wertschöpfung beteiligter Akteure einschließlich des Anbieters“ (Popp, Horbel, & Woratschek, 2017, S. 508).

Co-Creation-Prozesse, Value Propositions (inklusive der fünf in der Literatur definierten Engagement-Eigenschaften; siehe dazu Chandler & Lusch, 2015) und die Verknüpfungen im System HE werden unter Berücksichtigung der Wertschöpfungskonfigurationen Wertnetz und Wertshop im nachfolgenden System- and Course Framework (Abb. 1) visualisiert.

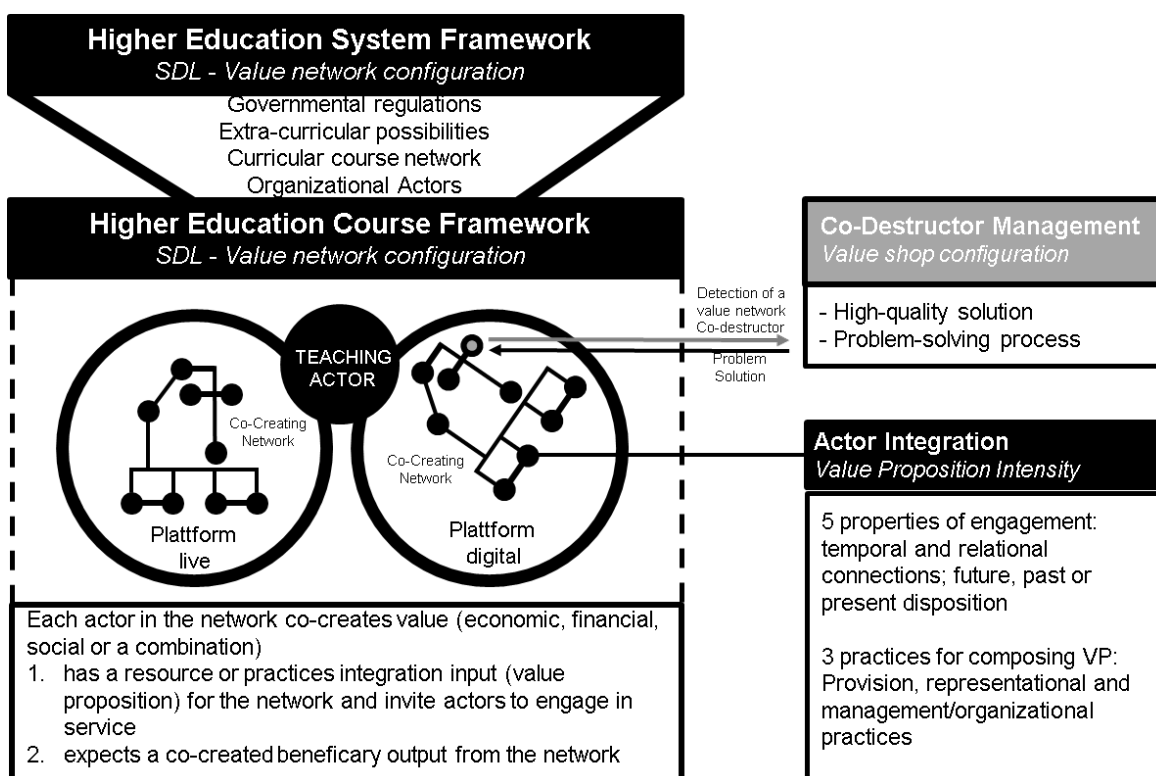


Abb.1: HE System and Course Framework (Quelle: Wawrzinek, Ellert, & Germelmann, 2017b, S. 274)

Die in HE dominierenden Wertschöpfungskonfigurationen sind das Wertnetz und der Wertshop. So ist beispielsweise die Forschung ein klassischer Wertshop, verstanden als hochwertiger Problemlösungsprozess, denn: „...the best possible answers to the research question are primarily identified at the beginning of the research process, which always attempt to grasp a problem in the social reality“ (Wawrzinek, Ellert, & Germelmann, 2017b, S. 279). Wichtig ist es an dieser Stelle, zu erwähnen, dass das Ziel eines Wertshops nur erreicht werden kann, wenn ein entsprechend funktionsfähiges Wertnetz existiert. In Bezug auf Forschung ist hier beispielsweise die Kollaboration und Co-Creation mit anderen Forschern im Rahmen von Publikationen gemeint. Basierend auf den theoretischen Erkenntnissen zur SD-logic, den Wertschöpfungskonfigurationen und Co-Creation im Kontext von HE wurde in Anlehnung an das Sport Value Framework von Woratschek, Horbel und Popp (2015) das Higher Education Value Framework entwickelt. Dieses erlaubt ein besseres Verständnis von HE-Phänomenen und eine neue Denkweise im Kontext von HE, zudem enthält es insgesamt zehn Prämissen (siehe Abb. 2).

Zusammenfassende Beschreibung des Higher Education Value Framework

Higher Education Value Framework <i>Basic understanding of Higher Education</i>	
1	Understanding networks, developing problem solving competencies through teaching and learning, the ability for collaborative working and ethical values are the core values of higher education.
2	Service is the fundamental basis of exchange in higher education.
3	Educational goods (products and services) are vehicles for service provision and the actor must trust the quality of practices so as to create value.
4	Higher education facilities and customers/students can only offer value propositions and actors can engage with them.
5	Higher education facilities create value propositions mainly through the configuration of a value network.
6	Every complex value-network has value co-creators and co-destructors. To manage the co-destroyer, the value configuration changes to a value shop.
7	Value is always co-created by higher education facilities, students and other actors.
8	Co-created value is always value-in-use and value-in-context taking place on live or digital learning platforms for cognitive development.
9	The actors' focus within the value-proposition anatomy determines the higher education strategy decision for horizontal and vertical integration.
10	The role of higher education facilities, students and other stakeholders is to integrate the resources or practices within their specific networks to co-create value.

Abb. 2: Higher Education Value Framework (Wawrzinek, Ellert, & Germelmann, 2017b)

Die erste Prämisse des Frameworks liefert bereits einen ersten Ansatz für die in der Folgepublikation im Journal of Education and Development ausführlich ausgearbeiteten, übergeordneten strategischen Ziele von HE.

Diese können in folgende vier Basiskompetenzen unterteilt werden: Netzwerkverständnis, Problemlösungskompetenzentwicklung, die Fähigkeit zu kollaborativem Arbeiten und ein ethisches Werteverständnis. Im Framework bilden diese Ziele den Kern der HE. Diese Kompetenzen können als Wertvorschläge seitens der HEI auf entsprechenden Plattformen (z.B. im Unterrichtsraum) aufgefasst werden. Gleichzeitig können diese Werte nicht allein von den HEI produziert werden, denn sie durchlaufen zunächst die Integration anderer

Netzwerkakteure, wie beispielsweise Studierender. Wie die Studierenden mit den genannten Wertvorschlägen umgehen, hängt von deren Aktivitäten ab. Wie bereits erwähnt, ist service, verstanden als das in Dienstleistungen und Produkten (services and products) wie beispielsweise Kursen angewandte Wissen, der Kern des Austauschs in HE. Auch die in HE dominierenden Wertschöpfungskonfigurationen Wertnetz und Wertshop (Nr. 5 und 6) sowie das Co-Creation-Paradigma (Nr. 7) sind im Framework integriert. Dabei ist zu beachten, dass ko-kreierter Wert immer ein Gebrauchswert, also „value-in-use“ und zudem kontextabhängig, also „value-in-context“ ist (vgl. Woratschek, Horbel, & Popp, 2015, S. 16). In Bezug auf HE wurde für diese Prämisse das Beispiel des Frontalunterrichts in einem überfüllten Hörsaal gewählt. Dort wird ein völlig anderer Wert kreiert als in einem kleinen Saal mit wenigen Teilnehmern und der Möglichkeit zu intensivem Austausch und Feedback. Natürlich kommt es dabei auch auf den inhaltlichen Fokus des jeweiligen Kurses an.

Die neunte Prämisse bezieht sich auf den spezifischen und unterschiedlichen Fokus der Akteure hinsichtlich der Wertvorschlagsanatomie. Dieser bestimmt dabei die strategische Entscheidung für horizontale oder vertikale Integration. Im Kontext HE ist darunter Folgendes zu verstehen: Während der Akteur „Student“ sich beispielsweise auf Problemlösungen im Rahmen des Unterrichts konzentrieren muss, kann es sein, dass der Dozierende wiederum einen völlig anderen Fokus verfolgt, zum Beispiel die reine Wissensvermittlung. Um diese beiden Wertvorschläge miteinander in Einklang zu bringen, müssen selbige erst einmal identifiziert werden. Die zehnte und somit letzte Prämisse fasst die Erkenntnisse der vorangegangenen grundlegend zusammen.

Insgesamt bietet das veröffentlichte Higher Education Value Framework eine geeignete Strukturierungs- und Analysemöglichkeit für HE-Phänomene und hilft dabei, die Wertschöpfung in HE neu zu betrachten.

2.2 ZUSAMMENFASSUNG PUBLIKATION 2

Wawrzinek, D., Ellert, G., & Germelmann, C. C. (2017). What's the Purpose of Higher Education? Proposing Meso-Level Operationalizable Superordinate Strategic Goals for Higher Education Developing the Higher Education Strategy Model and Metrics (HESM & M). *Journal of Education and Development*, 1(1), 12-23.

Durch die Adaption der SD-logic und die Identifikation der dominierenden Wertschöpfungskonfigurationen wurde ein geeignetes theoretisches Fundament für die Betrachtung und Analyse von HE gelegt. Ebenfalls wurde durch die sich daraus ableitende Entwicklung des Higher Education Value Framework ein passender Analyserahmen für Wertschöpfungsphänomene im Kontext der Hochschulbildung geschaffen. Diese Umstände führten im nächsten Schritt zu einer weiteren, grundlegenden Frage: Was ist das Ziel bzw. der Zweck von Hochschulbildung? Im strategischen Management von Organisationen ist eine klare Definition von entsprechenden Zielen eine der wichtigsten Aufgaben: Strategische Ziele sind von EntscheiderInnen und Entscheidern festgelegte, erfolgsfördernde Aktivitäten, die MitarbeiterInnen Orientierung bieten und an die Mission und Vision einer Organisation gekoppelt sind. Das Balanced Scorecard Institute (2018) formuliert es wie folgt: „Strategic Objectives Are Continuous Improvement Activities that we have to implement for success“. HEI sind, auch wenn bezüglich der Betrachtung dieser Entwicklung vor allem in der HochschulpädagogInnen-Community eine weit verbreitete Skepsis gegenüber einer betriebswirtschaftlichen Perspektive auf Hochschulbildung existiert, „stakeholder organisations“ (Amaral & Magalhaes, 2002). Diese erfordern einen zunehmend unternehmerisch geprägten Management-Stil (Maric, 2013). Die wachsende Orientierung am „market oriented paradigm“ schreitet, unter anderem aufgrund der Internationalisierung und des erhöhten Wettbewerbsdrucks, unaufhaltsam voran, wenn auch in unterschiedlichen Ausprägungen (Dobbins & Knill, 2017, S. 74). Daher manifestieren sich grundlegende Konsequenzen für die strategische Leadership-Arbeit von Higher Education-Entscheidern. Ebenfalls liegt darin die Basis für die Suche nach einer Antwort auf die bereits im Titel dieser Publikation gestellte Frage „What's the purpose of higher education?“.

In der HE-Literatur und auf den besuchten Fachkonferenzen wurde zu dieser Thematik nur wenig brauchbare Forschung präsentiert. Bezogen auf den US-amerikanischen Hochschulmarkt konstatieren auch Chan, Brown and Ludlow (2014): „... limited research has explored the primary goals and purposes of higher education and to what extent college students develop skills and attributes...“ (S. 2). Darüber hinaus ist festzustellen, dass die Beantwortung dieser gesellschaftlich hochrelevanten Frage äußerst vielfältige

und unterschiedliche Perspektiven mit sich bringt. So formuliert das US-amerikanische National Center for Public Policy and Higher Education (1998) beispielsweise eine eher allgemeine Definition: „To promote citizenship, ... preparing people to be good members of families ... educating people with world-competitive skills“. Das deutsche Bundesministerium für wirtschaftliche Entwicklung und Zusammenarbeit (2018) wiederum sieht die Bedeutung von Hochschulbildung in der „...Vermittlung von Kenntnissen, Fähigkeiten und Fertigkeiten, die es Jugendlichen und Erwachsenen ermöglichen, eine Beschäftigung zu finden oder ein eigenes Unternehmen zu gründen“. Chan, Brown und Ludlow (2014) hingegen weisen auf große Unterschiede zwischen der institutionellen und studentischen Perspektive hinsichtlich des Zwecks von Hochschulbildung hin:

... higher education institutions have placed heavy emphasis on much larger and grander objectives to do with reforming society and the classic individual cognitive and communicative agendas. In contrast, undergraduate students appear to focus much more on personal economic, family, and personal development goals.

Das Ziel dieser Publikation in Form eines Conceptual Paper bestand zunächst darin, die zahlreichen unterschiedlichen Perspektiven auf Ziele und Zwecke von Hochschulbildung zu identifizieren. Diese sollten anschließend gebündelt werden und einen übergeordneten Rahmen in Form der „Superordinate Strategic Goals“ bilden. Die große Vielfalt an Zielen und Zwecken von Hochschulbildung verdeutlichten zudem den Bedarf nach integrativen Modellen, welche dabei helfen, komplexe Herausforderungen, mit denen HEI und deren Stakeholder in zunehmendem Maße konfrontiert sind, zu managen.

Basierend auf der theoretischen Perspektive der SD-logic im Kontext von HE (siehe zum Beispiel Vargo & Lusch, 2016; Wawrzinek, Ellert, & Germelmann, 2017b), wertvollen Erkenntnissen aus der Visualisierungs- und Komplexitätsforschung (siehe zum Beispiel Burkhard, 2007; Dörner, 2012), Knowledge-, Information- und Concept-Mapping (siehe zum Beispiel Lima, 2011; Tergan, 2005), Managementliteratur (siehe zum Beispiel Hungenberg, 2008; Tabatoni & Barblan, 2000) und Lernpsychologie wird daher ein holistisches Strategiemodell präsentiert. Das Higher Education Strategy Model (HESM) soll Hochschulentscheidern und Managern dabei behilflich sein, ein besseres Verständnis des Gesamtsystems HE, dessen strategischer Ziele und deren Messbarkeit zu erlangen: „Irrespective of the branch of study, the HESM can be used as a decision-making aid in operative tasks regarding curriculum creation and optimization of teaching and learning contents“ (Wawrzinek, Ellert, & Germelmann, 2017a, S. 12).

Wichtig ist an dieser Stelle, zu erwähnen, dass dieser Beitrag keine normative Position hinsichtlich positiver oder negativer Entwicklungen von HE einnimmt. Somit handelt es

sich nicht um eine Einteilung bezüglich der Aussagen „So soll es sein“ oder „So soll es nicht sein“. Vielmehr handelt es sich um ein theoriegeleitetes Conceptual Model, das bestehende Erkenntnisse zu Zielen und Zwecken von Hochschulbildung ordnet, Zusammenhänge visualisiert und kategorisiert.

Das präsentierte Modell setzt es sich zum Ziel, eine holistische, strategische Orientierungshilfe für Hochschulentscheider zu bieten. Zusätzlich soll diese das Systemverständnis, die Messung strategischer Ziele von HE und die Entwicklung geeigneter operativer Maßnahmen ermöglichen bzw. erleichtern. Im Rahmen einer qualitativen Forschungsstrategie wurden Interviews mit insgesamt acht Experten aus den Bereichen HE, Psychologie, Management und Dienstleistungsmanagement in einer Workshopsituation geführt. Auf diese Weise konnten zusätzliche, für das Strategiemodell nutzbare Erkenntnisse zu den Zielen und Zwecken von Hochschulbildung erarbeitet werden: „ ... every single expert was able to provide their expertise and to depict and refine their understanding of the strategy model and relevant connections directly by means of a sequential mapping method“ (Wawrzinek, Ellert, & Germelmann, 2017a, S. 16). Das Ergebnis dieser Sitzungen soll nachfolgend dargestellt und erläutert werden.

Zusammenfassende Beschreibung des Higher Education Strategy Model (HESM)

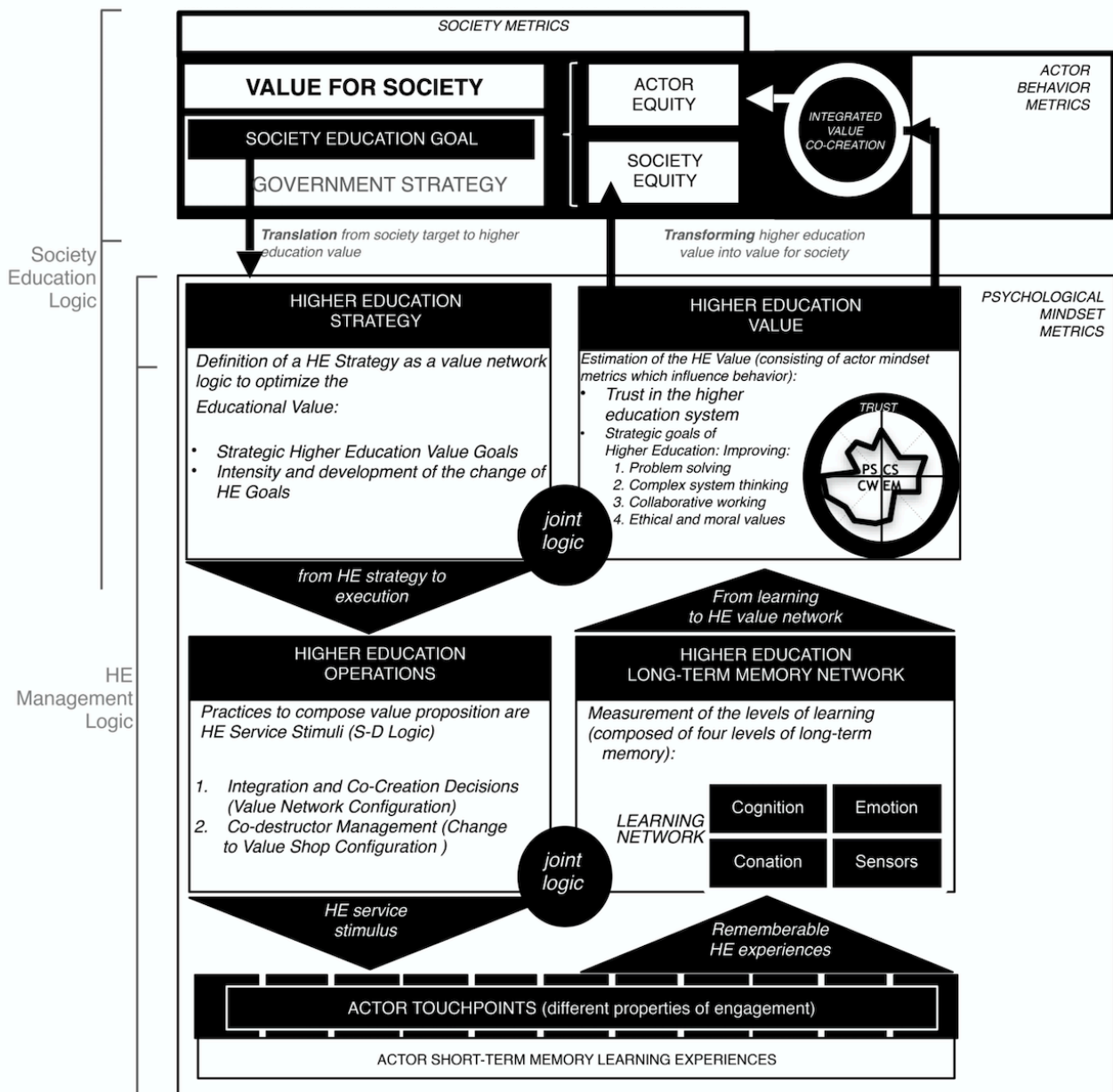


Abb. 3: Das Higher Education Strategy Model (HESM) (Wawrzinek, Ellert, & Germelmann, 2017a, S. 16)

Der obere Bereich des Strategiemodells schafft das Abbild eines Wertes von HE für die Gesellschaft in einem sich ständig ändernden Kontext. Dieser Wert wird in der Regel durch das für Hochschulbildung und -entwicklung zuständige Ministerium eines Landes im Rahmen einer Regierungsstrategie gefördert, gefordert und definiert. Direkt darunter befindet sich der Bereich *Higher Education Strategy*. Die Higher Education Strategy leitet sich aus der *Government Strategy* ab bzw. ist unmittelbar an diese geknüpft.

Um die von der Regierung festgelegten oder zumindest geforderten Ziele zu erreichen, müssen HEI entsprechende Strategien implementieren. Strategisches Management ist dabei ein wichtiges Werkzeug, um langfristige Erfolge zu erzielen. Hungenberg (2008) weist in diesem Kontext darauf hin, dass strategische Entscheidungen aus einer allumfassenden Perspektive getroffen werden sollten. Eine holistische Visualisierung des Systems HE, wie es das Strategiemodell abbildet, bietet eine Möglichkeit so eine allumfassende Perspektive einzunehmen.

Eng mit dem Bereich Higher Education Strategy verbunden ist der Bereich *Higher Education Value*. Dieser integriert die vier übergeordneten strategischen Ziele von Hochschulbildung: *problem solving*, *complex system thinking*, *collaborative working* und *ethical and moral values*. All jene Ziele, welche in der Literatur identifiziert werden konnten, lassen sich unter diesen vier übergeordneten strategischen Zielen von HE subsumieren. Diese stellen gleichzeitig zu vermittelnde Basiskompetenzen für Studierende dar. Sie bilden eine Art Kompass für die Richtung strategischer Managemententscheidungen und können zudem als sogenannte Key Performance Indicators (KPIs) betrachtet werden: „Their purpose consists of performance measurement and control of processes, projects and divisions“ (Wawrzinek, Ellert, & Germelmann, 2017a, S. 18). So ist es möglich, dass diese KPIs beispielsweise von Hochschulentscheidern hinsichtlich deren Ist-Zustand zunächst erhoben und mit den Soll-Vorgaben in Regierungsstrategien abgeglichen werden. Im Anschluss ermöglichen sie es wiederum, operative Maßnahmen entsprechend zu ändern oder zu optimieren, wenn es erforderlich ist.

Der Bereich *Higher Education Operations* integriert die theoretischen Kenntnisse bezüglich SD-logic, der dominierenden Wertschöpfungskonfigurationen und Co-Creation im Kontext von HE. Die Wertschöpfung lässt sich an dieser Stelle wie folgt beschreiben: „... the value generated in this case in a collaborative learning and teaching process through participation of diverse actors is education, respectively teaching the relevant competences in order to achieve the four strategic higher education goals“ (Wawrzinek, Ellert, & Germelmann, 2017a, S. 18). Dort, wo eine Ko-Kreation stattfindet, besteht zudem stets die Gefahr der Ko-Destruktion, also der Gefährdung und Zerstörung der Ko-Kreation innerhalb des Wertnetzes. Ein Beispiel ist die Unterrichtssituation in einem überfüllten Hörsaal: Studierende, die über keinen Sitzplatz verfügen, ständiges Kommen und Gehen oder Plaudern mit den Sitznachbarn sind Faktoren, welche den Lärmpegel derart erhöhen, dass die Aufnahme von wichtigen Inhalten beeinträchtigt wird. In so einem Fall müssen Problemlösungsaktivitäten in Form eines Wertshops in Kraft treten, um die Ko-Kreation nicht weiter zu gefährden. Eine Möglichkeit ist eine Übertragung des Unterrichts per Live-

Stream, so dass Studierende von zu Hause teilnehmen können. Auch die Planung von Zusatzvorlesungen kann eine geeignete Problemlösungsaktivität darstellen.

Der Bereich *Higher Education Long-Term Memory Network* ist eng mit dem der Higher Education Operations verknüpft. Er berücksichtigt Erkenntnisse zur Psychologie des Lernens. Damit ist der Vorgang der Informationsspeicherung im Langzeitgedächtnis gemeint. Informationsselektion und -verarbeitung kann dabei auf vier Ebenen durchgeführt werden: kognitiv, affektiv, konativ und motorisch (vgl. Ellert, Czarske, & Schebler, 2018). Wenn letztendlich ein grundlegendes Verständnis darüber besteht, wie Informationen selektiert, verarbeitet und gespeichert werden, können auch entsprechende Maßnahmen entwickelt oder angepasst werden, um die vier strategischen Ziele von HE zu erreichen.

Der Bereich *Actor Touchpoints* bezeichnet die Plattform, auf welcher alle Akteure durch Ko-Kreation Wert generieren. Dies kann live (durch beispielsweise Unterricht vor Ort) oder digital (beispielsweise durch E-Learning-Services) geschehen. Auf dieser Plattform sollen erinnerbare HE-Momente geschaffen werden, die sich im Langzeitgedächtnis verankern. Dabei werden wiederum die „Five Properties of Engagement“ nach Chandler und Lusch (2015) berücksichtigt sowie integriert. Zu beachten ist dabei, dass die Autoren hinsichtlich der Definition von Engagement auf zwei Kerneigenschaften hinweisen: „... engagement is based on both the connections of an actor and the psychological dispositions of an actor“ (S. 9). Da HEI im Rahmen eines Wertnetzes durch Co-Creation und die Integration entsprechender Value Propositions, definiert als „invitations from actors to one another to engage in service“ (Chandler & Lusch, 2015, S. 8), Wert schöpfen, ist es wichtig, sich der Bedeutung für das Engagement bewusst zu sein: „Value propositions thus invite, shape and potentially transform engagement in service“ (Chandler & Lusch, 2015, S. 17). Um wiederum für HEI entsprechende Maßnahmen abzuleiten oder zu optimieren, ist ein grundlegendes Verständnis der Eigenschaften von Engagement nötig, da dies in der Lernpsychologie mit erhöhtem Lernerfolg in Verbindung gebracht wird. Dazu zählen: „temporal connections“, „relational connections“, „future disposition“, „past disposition“ und „present disposition“ (Chandler & Lusch, 2015, S. 9).

Um die Gesamtlogik des Strategiemodells zu veranschaulichen, sollen die Denkrichtung und Lesart anhand eines konkreten Beispiels zusammengefasst dargestellt werden:

Sieht die HE-Strategie der Regierung eine Sensibilisierung des ethisch-moralischen Werteverständnisses bei Studierenden hinsichtlich des Themas Nachhaltigkeit vor (Bereich *Higher Education Value*), beeinflusst diese Vorgabe die Strategie der jeweiligen Hochschule (*Higher Education Strategy*). Anschließend geht die logische Denkrichtung in den Bereich des *Higher Education Long-Term Memory Network* über. Dieser ist wiederum

direkt mit der Plattform *Actor Touchpoint* verbunden. Nur durch ein Verständnis, wie und auf welcher Plattform (live oder digital) Informationen sowie Lehr- und Lerninhalte im Langzeitgedächtnis verankert werden, können geeignete operative Maßnahmen (*Higher Education Operations*) entwickelt werden. Diese wiederum generieren einen gesellschaftlichen Wert.

Zum Abschluss dieser Publikation werden Implikationen in Form einer „Future Research Agenda“ definiert (Abb. 4).

FUTURE RESEARCH AGENDA	Research area TIME	Research area ACTORS	Research area CONTEXT
SOCIETY METRICS	Which KPIs indicating value generation in society in a chronological sequence need to be tracked?	How do the actors of the different scientific disciplines contribute and to what extent are there efficiency differences regarding the strategical goals?	How do the single strategical higher education goals influence the different areas of societal value creation?
STRATEGY METRICS	Which superordinate strategical goals have which effect rate?	How do actors adapt the correlations between the different strategic goals?	Are there possible co-destructors that can be identified within the context of strategic goals?
OPERATIONS METRICS	Which psychological-pedagogical services are chronologically particularly effective in order to achieve the superordinate, strategic goals?	How do actors transform long-term brain learning into strategical values?	Which processes are particularly effective in order to create service innovation in the field of higher education?

Abb. 4: Future Research Agenda (Wawrzinek, Ellert, & Germelmann, 2017a, S. 19)

Diese sind in die Forschungsbereiche Zeit, Akteure und Kontext sowie in die Metrikebenen Gesellschaft, Strategie und Maßnahmen unterteilt.

Hinsichtlich des Forschungsbereichs Zeit in Bezug auf die Metrikebene Kontext stellt sich beispielsweise die folgende zukünftige Forschungsfrage: In welcher Weise beeinflussen die einzelnen strategischen Ziele von HE die unterschiedlichen Bereiche der gesellschaftlichen Wertschöpfung? Bezüglich der Metrikebene Strategie stellt sich zudem die Forschungsfrage, ob im Kontext der strategischen Ziele mögliche Ko-Destruktoren identifiziert werden können. Hinsichtlich des Forschungsbereichs Zeit in Bezug auf die Metrikebene Operations kann als zukünftige Forschungsfrage wiederum die folgende

gestellt werden: Welche didaktischen Services sind besonders effektiv, um die übergeordneten strategischen Ziele von HE zu erreichen?

Die zuletzt genannte Frage wird beispielsweise im letzten Beitrag der Publikationstrilogie dieser Dissertation aufgegriffen und im Zuge dessen genauer untersucht.

Wie bereits gezeigt werden konnte, bietet das in diesem Beitrag entwickelte Strategiemodell Entscheiderinnen und Entscheidern im Bereich HE ein Management-Tool. Dieses integriert übergeordnete strategische Ziele von HE und versucht somit, die in der Literatur vielfältigen Ziele und Zwecke zu bündeln. Die strategischen Ziele berücksichtigen in der Literatur gestellte Forderungen bezüglich zu vermittelnder Kernkompetenzen. Letzteren kommt im Zuge der europäischen Reform des Bologna-Prozesses eine besondere Bedeutung zu (vgl. zum Beispiel Schaper, Schlömer, & Pächter, 2013):

„... students should, in addition to professional-scientific competencies, acquire skills that enable them to adopt and adapt their academic knowledge to applied operational areas“ (Wawrzinek, Ellert, & Germelmann, 2017a, S. 19).

Ferner visualisiert das Modell sowohl die Zusammenhänge der gesellschaftlichen Wertschöpfung, als auch die für letztere wichtigsten Akteure aus der theoretischen Perspektive der SD-logic. Dieses Modell kann demnach als Überblicks- und Entscheidungshilfe bezüglich der Entwicklung geeigneter operativer Maßnahmen im Rahmen der Curriculumsgestaltung sowie der Optimierung von Lehr- und Lerninhalten genutzt werden. Dabei ist es von der Studienrichtung unabhängig. Auf dem 2nd Annual International Symposium on Higher Education in a Global World in Athen wurde das HESM in der Session „Leadership, Administration, Policy and Systems of Education I“ vor zahlreichen HE-ExpertInnen präsentiert und von diesen interessiert aufgenommen. Die in der anschließenden Diskussion geäußerte Bestätigung der Bedeutsamkeit solcher strategischer Management-Modelle für HEI sowie die Ermutigung des Autors, weiterhin in diesem Bereich zu forschen und zu publizieren, leisteten einen wichtigen Beitrag zur Anfertigung des nachfolgenden White Paper.

2.3 ZUSAMMENFASSUNG PUBLIKATION 3 (WHITE PAPER)

Mapping the Logic of Value in Higher Education - A Theoretical Adaption of Service-Dominant Logic and an Empirical Case Study in the Context of Executive Education

In der ersten Publikation wurde eine in der HE-Community weitestgehend unbekannte theoretische Perspektive auf Hochschulbildung durch die Adaption der SD-logic vorgestellt. Dies geschah unter besonderer Berücksichtigung der dominierenden Wertschöpfungskonfigurationen Wertnetz und Wertshop sowie des Co-Creation-Paradigmas. Die sich daraus ableitende Entwicklung in Form des Higher Education Value Framework ermöglicht es, das System HE und die Rollen der darin aktiven Akteure mit bestehenden Theorien neu zu erdenken. Dieser Umstand legte das theoretische Fundament, unter anderem ebenso für die Folgebeiträge.

Die zweite Publikation bietet durch das Higher Education Strategy Model (HESM) ein strategisches Tool zur Visualisierung des Systems HE. Dieses Modell ermöglicht ein holistisches Verständnis und befasst sich zudem mit der grundlegenden Frage nach dem Ziel und Zweck von Hochschulbildung. Den HE-Entscheidern wird, unabhängig von der Studienrichtung, eine Navigations- und Orientierungshilfe in einer immer komplexer, internationaler und digitaler werden Hochschullandschaft zur Verfügung gestellt. Dies wird durch die Entwicklung der vier übergeordneten strategischen Ziele von HE und deren Integration in das Strategiemodell ermöglicht.

Nach dieser sehr allgemeinen und systemischen Betrachtungsweise von HE werden im dritten und letzten Beitrag dieser Dissertation die vorangegangenen Erkenntnisse genutzt. Dies soll dazu dienen, einen anwendungsorientierten, interdisziplinären Ansatz im spezifischen Kontext der Executive Education zu verfolgen.

Das Ziel des finalen Papers bestand darin, eine Executive Education Strategy Map (EESM) für Hochschulentscheider zu entwickeln, die sowohl Überblicks-, Planungs- und Steuerungstool, als auch Grundlage für die Entwicklung eines hochwertigen Kennzahlensystems in weiterführenden Forschungsprojekten ist.

Es folgt die Darstellung der leitenden Forschungsfragen. Wie gestaltet sich unter besonderer Berücksichtigung von Schwerpunkten, Gemeinsamkeiten und Unterschieden bezüglich der Wertschöpfungsziele der Akteure Studierende und HochschulpräsidentInnen die systematische Vernetzung von operativer und strategischer Ebene in Form einer Strategy Map? Wie gestaltet sich diese Strategy Map im spezifischen Kontext der Executive Education als Grundlage für die Entwicklung hochwertiger Kennzahlensysteme zur Steuerung von Higher Education Institutions (HEI)? Wie kann klassisches

Management-Wissen zum strategischen Steuerungstool Strategy Map für den Bereich Executive Education genutzt, umgesetzt und optimiert werden, um für die Herausforderungen und Anforderungen der aktuellen Higher Education-Transformation gerüstet zu sein?

Um entsprechende Antworten auf diese Fragen zu finden, wurde eine qualitativ-empirische Forschungsstrategie gewählt (siehe unten „Zu Methodik und Research Design“): „... qualitative researchers will use existing literature, research and theory as a background or springboard for launching their own research in ways which connect it with current debates“ (Mason, 2018, S. 15). Die vorangegangenen Publikationen bilden dabei das von Mason beschriebene „Sprungbrett“ für das nachfolgend zusammengefasste Forschungsprojekt.

Executive Education, in diesem Beitrag verstanden als Bestandteil der Business Education, wird definiert als “the process used to develop, expand, or improve capabilities of current senior leaders or to position individuals for future senior leadership roles within an organization” (Hura, 2012, S. 203). MBA (Master of Business Administration)-Studiengänge als Teil dieser Business bzw. Executive Education erfreuen sich weltweit großer Nachfrage. Nicht zuletzt die Maxime des lebenslangen Lernens (vgl. OECD, 2001) und massive Veränderungen von Berufsprofilen im Zuge der Digitalisierung und Automatisierung verleihen dem Thema akademische Weiterbildung entsprechende Relevanz. Studierende erlangen durch den Abschluss eines berufsbegleitenden Studiums einen signifikanten Wettbewerbsvorteil (Turner, Stawicki, & Guo, 2017, S. 1655) und versuchen durch Weiterqualifizierungen, den Anforderungen des Arbeitsmarkts gerecht zu werden. Parallel dazu befinden sich auch HEI im Wettbewerb um die besten BewerberInnen und Studierenden. Phänomene wie Internationalisierung, Massification oder Digitalisierung (Enders, 2004; Han & Zhong, 2015; Kettunen, 2008; Manning, 2017; Wawrzinek, Ellert, & Germelmann, 2017a) führen zu neuen Herausforderungen und erhöhter Komplexität im Management von HEI. Strategische Management-Tools zur Steuerung und Kontrolle von Prozessen, zur Entscheidungsfindung sowie Zielerreichung- und Messung sind wichtige Hilfsmittel, um erhöhte Komplexität und daraus resultierende Unsicherheiten entsprechend managen zu können.

Eine Strategy Map (Han & Zhong, 2015; Kaplan & Norton, 2004) ist ein solches, geeignetes Tool mit etlichen Vorteilen und wird in diesem Beitrag eigens für den Bereich Executive Education entwickelt. Das Tool Strategy Map stammt ursprünglich aus der Strategic Management-Literatur. Mittlerweile findet es allerdings auch in HEI Verwendung und wirkt sich vorteilhaft auf den Bereich des Managements aus (siehe zum Beispiel Han

& Zhong, 2015; Kettunen 2008). Han und Zhong (2015) benennen einige Vorteile von Strategy Maps in HE: „First strategy maps enhance university management and promote good governance ... Second, a strategy map is not a rigid planning mechanism; it can be revised and adapted in response to society“ (S. 940).

Die theoriegeleitete Auswertungsmatrix der EESM vereint diese Erkenntnisse aus der Management- und Higher Education-Literatur mit den theoretischen Erkenntnissen der vorangegangenen Publikationen hinsichtlich der Wertschöpfungskonfigurationen (Wertnetz und Wertshop) unter Berücksichtigung der SD-logic und des Co-Creation-Paradigmas. Die Adaption der SD-logic im Kontext von Higher Education ermöglicht ein besseres Verständnis und eine genauere Einordnung der Rollen, Ziele, Beziehungen und Bedürfnisse von Studierenden und anderen beteiligten Netzwerkakteuren. Dozierende werden damit beispielsweise nicht mehr als reine „Bildungsserviceprovider“ gesehen. Vielmehr sind auch der Unterrichtsraum, die Bestuhlung oder die Beleuchtung ein wichtiger Teil der Leistungserbringung. Lusch und Wu (2012) vertiefen und veranschaulichen diese Erkenntnis wie folgt: „For this reason, in Service-Dominant logic, all individuals and entities are viewed as resource integrators or service bundlers“ (Lusch & Wu, 2012, S. 3). Der Wert, welcher im Rahmen der Executive Education geschöpft wird, entsteht wiederum durch die bereits beschriebene Co-Creation. In einem ersten Schritt ist anhand dieses theoretischen Bezugsrahmens folgende Auswertungsmatrixversion entstanden (siehe Abb. 5).

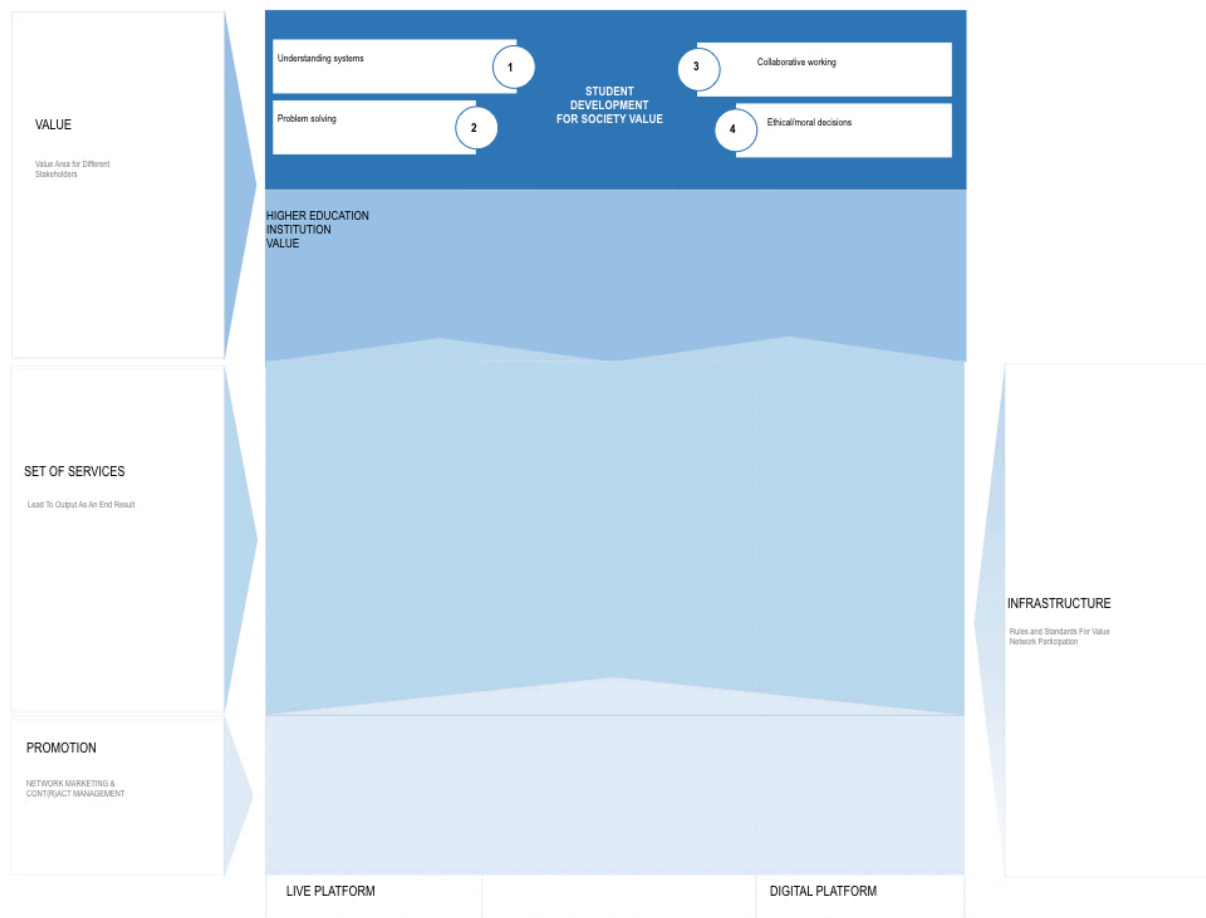


Abb. 5: Erste Version der Strategy Map als Grundlage für die Fokusgruppen- und ExpertInneninterviews

Die Bereiche *Set of Services*, *Promotion* und *Infrastructure* entsprechen den primären Aktivitäten der in der Executive Education dominierenden Wertschöpfungskonfiguration Wertnetz. Im oberen Abschnitt wird der Bereich *Value* für die unterschiedlichen Akteure auf digitalen oder live-Plattformen (siehe unterer Bereich) abgebildet.

Die Auswertungsmatrix dieser Strategy Map-„Rohversion“ wurde bei Fokusgruppen- und Experteninterviews genutzt, um die währenddessen erhobenen Ergebnisse zu bündeln. Dadurch konnten diese unmittelbar durch Kollage- und Mappingtechnik eingearbeitet sowie letztendlich zugeordnet werden.

Wichtig ist, an dieser Stelle zu erwähnen, dass bereits bei dieser Strategy Map-Version die vier klassischen und allgemein bekannten Ebenen (Kunden-, Finanz-, Prozess- und Entwicklungsperspektive) (vgl. Kaplan & Norton, 2004, S. 7), bewusst durch die für den

Kontext Executive Education geeigneteren, theoriegeleiteten strategischen Dimensionen ersetzt und modifiziert wurden.

Ein Hauptkritikpunkt an der Balanced Scorecard als strategisches Kennzahlensystem zur Steuerung von Unternehmen, deren Ausarbeitung der nächste Schritt nach der Entwicklung einer Strategy Map ist (Kaplan & Norton, 2008), besteht in der Schwierigkeit bei der Formulierung von Ursache-Wirkungszusammenhängen für Organisationsformen wie Dienstleistungsbetriebe (Woratschek, Roth & Schafmeister, 2005). Zudem wird das Fehlen von Möglichkeiten, Netzwerke zu erfassen, bemängelt (Woratschek, Roth, & Schafmeister, 2005, S. 258).

Wie im theoretischen Bezugsrahmen dieses Beitrags demonstriert wird, bieten die in Higher Education dominierenden Wertschöpfungskonfigurationen Wertnetz und Wertshop einen geeigneten Strukturrahmen für eine Neugestaltung und Anordnung der Strategy Map-Ebenen. Diese Modifikation erlaubt eine übersichtlichere Darstellung von Wertschöpfung in Higher Education, entsprechender Ursache-Wirkungszusammenhänge und bietet zudem eine geeignete Ausgangsbasis für die Entwicklung einer modifizierten Balanced Scorecard im darauffolgenden Schritt.

Nachdem eine erste Auswertungsmatrix entwickelt wurde, stellte sich die Frage nach einer geeigneten Fülllogik der Strategy Map und Systematisierung der Forschungsergebnisse. Die Means-End-Theorie (Gutman, 1982; Liebel, 2007; Orsingher, Marzocchi, & Valentini, 2011) ist ein geeigneter Ansatz, um die Wertschöpfungsziele der Netzwerkakteure auf den verschiedenen Ebenen zu definieren, zu verstehen und zuzuordnen. Liebel (2007) liefert eine geeignete Definition und Beschreibung der Hauptannahmen dieser in der Marketingforschung weit verbreiteten und ausgiebig erforschten Theorie:

Means-End-Theorien gehen davon aus, dass Menschen bestimmte Wertvorstellungen und Zielsetzungen in ihrem Leben haben, die sich auch auf ihr Konsumverhalten auswirken, indem sie einen Zusammenhang zwischen den Eigenschaften eines Produkts oder einer Marke, den sich für sie ergebenden Konsequenzen bei einer Nutzung und ihrer Werterhaltung herstellen. Das Produkt bzw. die Konsumhandlung wird zum Mittel (means), um einem bestimmten Ziel (ends) näherzukommen. (S. 455)

Eine weitere Definition ist in einem Beitrag von Orsingher, Marzocchi & Valentini (2011) zu finden: „The basic assumption is that goals predominate in choice patterns, and that customers select products and services to achieve desired goals“ (S. 732). Da Means-End-Theorien ein Verständnis über die Zusammenhänge zwischen „produktimmanenten Bedeutungen und personenimmanenten Werten“ (Liebel, 2007, S. 455) ermöglichen, erschien eine Adaption für die Gestaltung der Fülllogik der Strategy Map als besonders

geeignet. Wie im obigen Zitat bereits beschrieben wurde, wählen Kunden bestimmte Produkte und Services, um gewünschte Ziele zu erreichen.

In der EESM werden die in Fokusgruppeninterviews identifizierten, gewünschten Wertschöpfungsziele (*ends*) der Studierenden abgebildet. Diese subsumieren eine Vielzahl an Services (*means*).

Zu Methodik und Research Design

Diesem Beitrag liegt eine qualitativ-empirische, induktive Forschungsstrategie zugrunde. Anhand der vorgestellten Theorien und der recherchierten Literatur zu (Higher Education) Strategy Maps wurde, wie oben dargelegt, zunächst eine Executive Education Strategy Map-Auswertungsmatrix mit modifizierten Ebenen als Ausgangsbasis konstruiert.

Zu unterschiedlichen Zeitpunkten durchgeführte, qualitative Fokusgruppeninterviews mit MBA-Studierenden und ExpertInneninterviews mit UniversitätspräsidentInnen wurden als Methode gewählt, um weiterführende, vertiefende Erkenntnisse zu den jeweiligen Wertschöpfungszielen der Akteure im Kontext Executive Education zu gewinnen. Somit sollte das „intellectual puzzle“ (Mason, 2018, S. 10) gelöst werden. Das dabei entstandene Sample besteht aus 21 Studierenden (aufgeteilt in drei Fokusgruppen; n=21) aus einem berufsbegleitenden Master of Business Administration-Studiengang an einer deutschen Universität und drei deutschen UniversitätspräsidentInnen (n=3). Das Messinstrument wurde anhand der zehn „Foundational Premises“ im Higher Education Value Framework (Wawrzinek, Ellert, & Germelmann, 2017b) operationalisiert. Zu jeder einzelnen Prämisse wurde eine Frage formuliert und in der jeweiligen Fokusgruppe zur Diskussion gestellt. Somit konnte eine Befragungslogik für die Datengenerierung entwickelt werden. Bezüglich der PräsidentInneninterviews wurden die Fragen entsprechend angepasst und umformuliert. Erkenntnisse und Ergebnisse wurden während der Fokusgruppeninterviews zudem unmittelbar und gemeinsam mit den Befragten anhand von Kollagen- und Mapping-Techniken in der Auswertungsmatrix (Abb. 5) geordnet, gebündelt und verknüpft. Um die in den Fokusgruppen- und ExpertInneninterviews gewonnenen Daten systematisch zu sammeln, auszuwerten und zu kategorisieren, bietet wiederum das Verfahren der Grounded Theory (Glaser & Strauss, 1999) als methodischer Ansatz geeignete Orientierungs- sowie Anknüpfungspunkte (vgl. z.B. Schmidt, Dunger, & Schulz, 2015). Das Vorgehen der Grounded Theory hilft dabei, die gewonnenen Daten in einem systematischen Analyseprozess zu kodieren und zu vergleichen, um sie übergeordneten Kategorien und ihren Bedeutungen zuordnen zu können. Die Datenerhebung wird

beendet, nachdem eine theoretische Sättigung erreicht ist, demnach keine neuen Erkenntnisse mehr zu erwarten sind. Diesem folgend wurde das Datenmaterial nach jedem Fokusgruppen- und ExpertInneninterview in Form der aufgezeichneten Audiospuren, Feldnotizen und der währenddessen entwickelten Strategy Maps aufbereitet, analysiert, interpretiert und kategorisiert. Im Nachgang wurden diese Ergebnisse bei den anschließenden Interviews in die erneute Datenerhebung integriert und hinsichtlich ihrer Zusammenhänge verfeinert, um wiederum neue Daten mit theoretischer Relevanz zu generieren und zu kategorisieren. Es folgte ein Vergleich der Ergebnisse untereinander, um Gemeinsamkeiten, Unterschiede sowie sich daraus ergebende Ursache-Wirkungszusammenhänge herauszuarbeiten und anschließend zu verdichten.

In der finalen Kodierungsphase wurden für das Untersuchungsphänomen wesentliche Kernkategorien in Form von übergeordneten Wertschöpfungszielen der jeweiligen Akteure gebildet und in die Auswertungsmatrix integriert. Dies geschah unter Berücksichtigung der oben bereits erläuterten Means-End-Theorie. Das finale Ergebnis wird nachfolgend dargestellt und genauer beschrieben.

Beschreibung der finalen Executive Education Strategy Map (EESM)

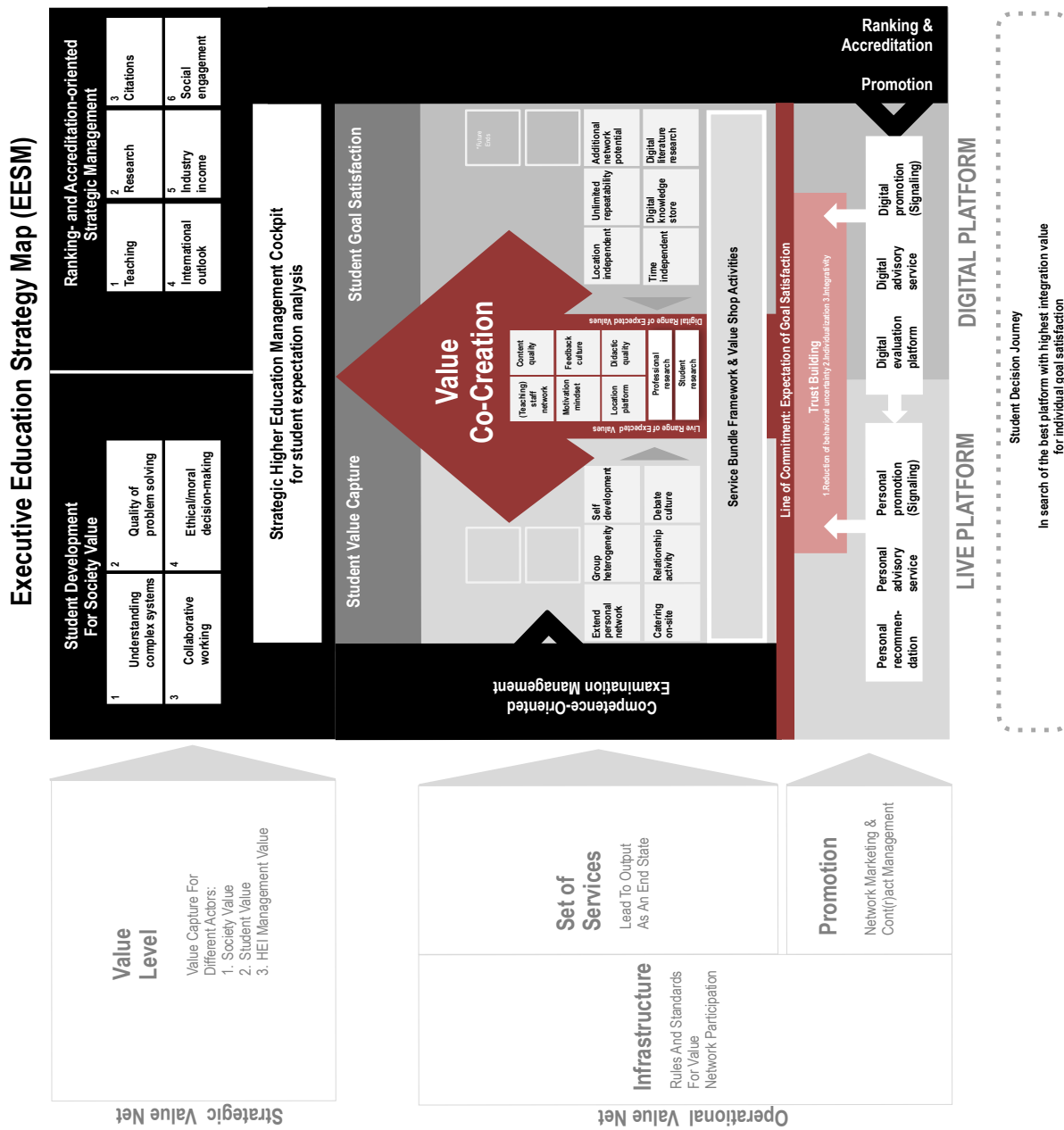


Abb. 6: Die Executive Education Strategy Map (EESM) (Wawrzinek, 2018)

Wird die erste Version der Strategy Map (siehe Abb. 5) mit der finalen, inhaltlich gefüllten Version verglichen, lassen sich deutliche Veränderungen feststellen. Die Ergebnisse der Fokusgruppen- und ExpertInneninterviews führten zu einer Neustrukturierung des oberen Bereichs (*Strategic Value Level*) und lieferten umfangreiches Datenmaterial, welches dem beschriebenen methodischen Vorgehen entsprechend eingearbeitet wurde.

Unverändert geblieben sind die drei theoriegeleiteten Basisebenen *Promotion*, *Set of Services* und *Infrastructure (Operational Level)* sowie die *Digital und Live Platform* im unteren Bereich.

Um die Denkrichtung, Lesart und Zusammenhänge der EESM nachvollziehen zu können, empfiehlt es sich, mit der *Student Decision Journey* auf der untersten Ebene (*Promotion*) zu beginnen. Werden auf digitalen und live Plattformen im Rahmen des *Network Marketing & Cont(r)act Management* studentische Zufriedenheitsziele erreicht, erfolgt der Aufbau eines Vertrauens in das Studienangebot. Dieses Vertrauen entsteht auf digitalen Plattformen unter anderem durch entsprechendes Signaling, verstanden als Kommunikation von USPs, also Unique Selling Propositions (Pastowski, 2004, S. 103). Zudem nehmen entsprechende Beratungsservices und reputationsfördernde Rankingergebnisse auf digitalen Bewertungsplattformen ebenfalls Einfluss. Auf live Plattformen wirken sich zudem entsprechende Signalingmaßnahmen, persönliche Betreuungsleistungen und positive Mundpropaganda vertrauensfördernd aus. Das Eingehen auf individuelle Bedürfnisse und zudem die Kommunikation von Möglichkeiten zur aktiven Beteiligung (*Integrativity*, siehe dazu Freiling & Paul, 1997, S. 1) während des Studiengangverlaufs sollen an dieser Stelle nicht unerwähnt bleiben. Sind Interessenten davon überzeugt, dass ihre persönlichen Zufriedenheitsziele durch die Aufnahme des Studiums erreicht werden können und ist dadurch ein gewisser Vertrauensgrad erreicht, überschreiten sie im metaphorischen Sinn sozusagen die rot markierte Linie *Line of Commitment*. Ist dies geschafft, betreten die Studierenden den Erwartungskorridor (roter Pfeil), in dem durch die Orchestrierung der unterschiedlichen live und digitalen Services (*Service Bundle Framework*), welche zu Zufriedenheitszielen (weiße Kästchen) gebündelt wurden, kontinuierlich Wert ko-kreiert und abgeschöpft (*Student Value Capture*) wird. Mit *Student Value Capture* ist hier gemeint, dass Studierende die für sie individuellen, jeweils relevanten Werte erfassen. So hat beispielsweise der Kurs X für ein Individuum einen deutlich größeren Wert für die Erreichung der persönlichen Zufriedenheitsziele als Kurs Y. Somit ist davon auszugehen, dass der Studierende dem Kurs X besondere Aufmerksamkeit und Hingabe widmet.

Der in der EESM integrierte Terminus *Student Value Capture* ist angelehnt an die Erkenntnisse zur Dimension „Ertragsmodell“ des wertbasierten Geschäftsmodellansatzes (Bieger & Reinhold, 2011) und wurde entsprechend adaptiert: „Das Ertragsmodell unterscheidet die Abschöpfung von Wert auf zwei Ebenen: die Abschöpfung von Kundenwerten und die Abschöpfung von Unternehmenswert, die über Kundenwerte geschaffen wird“ (Bieger & Reinhold, 2011, S. 46). Der *Student Value Capture* steht somit

in direktem Zusammenhang mit dem Kundenwert. Studierende sind die Kunden von Executive Education-Anbietern und zahlen einen bestimmten Preis für einen Studienplatz. Dies tun sie allerdings nur, wenn sie davon überzeugt sind, dass sie durch das gewählte Studium ihre Zufriedenheitsziele erreichen können. Die Studierenden bzw. Kunden müssen „den Wert der erbrachten Leistungen anerkennen und honorieren“ (Bieger & Reinhold, 2011, S. 46). Im Kontext der Executive Education ist dies nur möglich, wenn sie über das gesamte Studium hinweg die Möglichkeit haben, die Werte zu erfassen, welche für sie jeweils wichtig sind. Ist dies gegeben, können Executive Education-Anbieter wiederum Kundenwerte abschöpfen.

Da neben dem Wertnetz als dominierende Wertschöpfungskonfiguration auch der Wertshop nicht außer Acht gelassen werden darf, wurde dieser ebenfalls in der Map integriert (*Service Bundle Framework and Value Shop Activities*).

Auf der linken Seite, neben dem Erwartungskorridor, befinden sich alle in den Fokusgruppeninterviews identifizierten studentischen Zufriedenheitsziele auf live Plattformen. Die Zufriedenheitsziele auf digitalen Plattformen dagegen sind auf der rechten Seite zu finden. Im Erwartungskorridor wurden alle Ziele platziert, die sowohl live, als auch digitale Plattformen betreffen. Eine ausführliche Beschreibung aller Ziele und der darunter subsumierten Services ist unter Appendix B nachzuschlagen.

Der obere Bereich der EESM visualisiert das *Strategic Value Net*, innerhalb dessen die Akteure Gesellschaft, HEI und Studierende die für sich jeweils wichtigsten Werte erfassen. Links oben sind die in der vorangegangenen Publikation definierten, übergeordneten strategischen Ziele von Higher Education in Form von vier Basiskompetenzen enthalten (Wawrzinek, Ellert, & Germelmann, 2017a). Die Berücksichtigung und Förderung dieser vier strategischen Ziele bzw. Basiskompetenzen führt zu gesteigertem gesellschaftlichen Wert. Studierende, die in ihrem Studium hinsichtlich der Faktoren Problemlösung, kollaboratives Arbeiten, komplexes Systemverständnis und ethisch-moralisches Entscheiden entsprechend ausgebildet werden (hier ebenfalls unabhängig von der Fachrichtung des Studiums), sind auf die An- und Herausforderungen der Berufswelt vorbereitet. Sie leisten einen positiven Beitrag für die gesellschaftliche Entwicklung eines Landes. Diese Erkenntnis wurde auch von den interviewten UniversitätspräsidentInnen bestätigt. Ein normativer Anspruch hinsichtlich deren Implementierung wurde jedoch auch unter Berufung auf Freiheit von Forschung und Lehre (in Deutschland Art. 5 Abs. 3 GG) durchaus kritisch betrachtet.

Diese Kompetenzen stellen auch für Executive Education-Studierende äußerst wichtige, jedoch im Rahmen der Interviews nur implizit formulierte Ziele dar. Gerade diese

Erkenntnis verdient hierbei besondere Beachtung. Interessant ist diesbezüglich die Tatsache, dass die Studierenden teilweise zwar bestimmte, für sie wichtige Services, die zur Vermittlung der Basiskompetenzen führen, genannt haben, allerdings die konkreten Basiskompetenzen als Ziel nicht explizit benennen konnten. Die Vermittlung der Basiskompetenzen als Ziel wurde lediglich implizit zum Ausdruck gebracht. Ein zur Verdeutlichung geeignetes Beispiel ist die folgende Aussage eines Studierenden in einem Fokusgruppeninterview bezüglich des strategischen Ziels „kollaboratives Arbeiten“: „... ich lerne gern in Teams und ich habe das Gefühl, dass ich durch den Austausch im Team eigentlich (*betont*) erst lerne“ (17:29, FG1, S4). Bei der konkreten Vorstellung und Benennung der vier Basiskompetenzen wurde hinsichtlich deren Wichtigkeit umgehend kollektiv zugestimmt und betont, dass diese tatsächlich elementare, übergeordnete Ziele bzw. Basiskompetenzen darstellen. Umso wichtiger erscheint an dieser Stelle die daraus abzuleitende Handlungskonsequenz für Executive Education-Anbieter. Diese besagt, die übergeordneten strategischen Ziele bereits zu Beginn des Studiums durch Nennung zu aktivieren und offenzulegen, um den Studierenden diesen gegenüber ein Bewusstsein und eine Relevanz zu vermitteln.

Rechts oben wiederum befindet sich der Bereich *Ranking- and Accreditation oriented Strategic Management*.

Die Auswertung der ExpertInneninterviews mit UniversitätspräsidentInnen ergab, dass diese einen besonders großen Wert auf Top-Platzierungen in internationalen Rankings legen. Diese Rankings üben einen erheblichen Einfluss auf das Verständnis und die Gestaltung strategischer Managementaufgaben aus. Verwendete Kennzahlen zur Steuerung der HEI bezogen sich größtenteils auf die dargestellten Key Performance Indicators. Diese orientieren sich wiederum an den KPIs der bekanntesten internationalen und weltweit am meisten beachteten Universitätsrankings, wie zum Beispiel dem Times Higher Education World University Ranking. Diese Orientierung an einschlägigen Rankings wirkt sich ebenfalls auf die Gestaltung der Promotion-Ebene aus (siehe schwarzer Balken mit Pfeil auf der rechten Seite der EESM).

Nachdem die Perspektiven der UniversitätspräsidentInnen und Studierenden hinsichtlich der strategischen Ziele von HE ausgewertet wurden, stellte sich die Frage nach deren gezielter Aktivierung. Dabei sollte die Maxime der Freiheit von Forschung und Lehre jedoch nicht ignoriert werden. Eine Möglichkeit zur Aktivierung der übergeordneten strategischen Ziele von HE bzw. Basiskompetenzen unter Berücksichtigung und Anerkennung der in Deutschland grundgesetzlich festgeschriebenen Freiheit von Forschung und Lehre besteht in deren Einbettung in kompetenzorientierte Prüfungsformen

(siehe schwarzer Balken auf der linken Seite in Abb. 6). Diese eignen sich besonders gut für Executive Education-Studiengänge. Sie sind zudem an klar definierten, überprüfbaren Lernzielen ausgerichtet (Gaus, 2018) und berücksichtigen die veränderten Rollen von Lehrenden sowie Lernenden. Kompetenzorientierte Prüfungsformen bieten einen geeigneten Rahmen, um auf die inhaltliche Gestaltung von Executive Education-Studiengängen im Sinne des gesellschaftlichen Werts einzuwirken. So eignen sich Planspiele oder Simulationen beispielsweise sehr gut, um Problemlösungskompetenz und komplexes Systemverständnis zu prüfen. Werden solche Prüfungsformen eingeführt, ist automatisch auch eine Anpassung der Lehrmethoden und Services dahingehend vonnöten.

Das *Strategic Higher Education Management Cockpit* soll als integratives Tool schließlich mehreren Zwecken dienen. Durch geeignete Messverfahren, deren präzise Ausarbeitung eines weiteren Forschungsschritts bedürfen, soll herausgefunden werden, welche Ziele Studierende zu Beginn des Studiums haben, wie diese sich im Laufe der Zeit ändern und inwiefern eine Zielbefriedigung erreicht werden konnte. Zudem kann somit geprüft werden, welche Übereinstimmungen und Diskrepanzen zwischen den studentischen und den übergeordneten strategischen Zielen von Higher Education sowie den „Ranking- and Accreditation-oriented Strategic Management“-Indikatoren bestehen. Von besonders großem Interesse wird es dabei sein, zu erörtern, welche Übereinstimmungen diese Diskrepanzen dominieren. Dadurch können HEI entsprechende Services optimieren, verändern oder neu gestalten. Übergeordnet kann festgestellt werden, inwiefern die strategischen Ziele von HEI erreicht wurden. Diese wiederum können über kompetenzorientierte Prüfungen aktiviert werden.

Wie bisher gezeigt werden konnte, bietet die theoriegeleitete Auswertungsmatrix der EESM eine Systematik und Visualisierungsmöglichkeit, um die Wertschöpfungslogiken und Werttreiber verschiedener Akteure auf der Serviceplattform der Executive Education abzubilden, sie entsprechend einzuordnen und verstehen zu können. Sie integriert die Perspektiven der Netzwerkakteure Gesellschaft und die in qualitativen Interviews erhobenen Perspektiven deutscher MBA-Studierenden sowie UniversitätspräsidentInnen unter Berücksichtigung des Co-Creation-Paradigmas. Die EESM versucht ferner, Ursache-Wirkungszusammenhänge zwischen deren unterschiedlichen strategischen Zielen und Fokussen aufzuzeigen.

Die Strategy Map ist für Hochschulentscheider, wie beispielsweise PräsidentInnen, aber auch das Hochschulmarketing ein eigens entwickeltes, strategisches Management-Tool. Dieses bietet eine Grundlage für die Entwicklung geeigneter Messinstrumente, um

Übereinstimmungen und Diskrepanzen zwischen den unterschiedlichen Zielen der Akteure zu erörtern. In Form eines hochwertigen Kennzahlensteuerungssystems ist es damit möglich, diese zu analysieren und somit Services in beispielsweise Lehre, Administration oder Marketing bei Bedarf flexibel anzupassen, zu verändern oder zu verbessern.

3. Fazit

Die in dieser Klammer zusammengefasste Publikationschronologie dient einem Gesamtüberblick zu den Zielen, inhaltlichen Schwerpunkten und Zusammenhängen der Einzelbeiträge. Wie gezeigt wurde, liegen dem übergeordneten Thema „Value Configuration in Higher Education - Theoretical Development and Empirical Case Study“ dieser Dissertation insgesamt drei Publikationen zugrunde. Während die ersten beiden Aufsätze als Conceptual Paper zum Zeitpunkt der Erstellung dieser Zusammenfassung bereits publiziert sind, wird der finale, empirische Beitrag zunächst als White Paper eingereicht und soll anschließend ebenfalls in einem internationalen Double Blind Peer Review Journal veröffentlicht werden.

Ziel und Zweck dieser Dissertation bestehen in der Entwicklung einer geeigneten Logik, die es vermag, das System HE durch die Adaption bereits bestehender Theorien neu zu denken und für strategische Managementzwecke in der Praxis holistisch abzubilden und nutzbar zu machen.

Erkenntnisse aus dem Dienstleistungsmarketing zu Service-Dominant Logic, den Wertschöpfungskonfigurationen und dem Co-Creation-Paradigma erwiesen sich für eine theoretische Fundierung als besonders geeignet. Hochschulbildung wird dabei als Dienstleistung, verstanden als „application of competences for the benefit of another - as the central process for value creation“ (Vargo, Lusch, & Akaka, 2010, S. 137), aufgefasst. Diese theoretische Perspektive ermöglicht eine bessere Systematisierung und Analyse von Wertschöpfungsphänomenen sowie Werttreibern für die wichtigsten Akteure in HE (siehe dazu Higher Education Value Framework unter Publikation 1).

Auch das Gesamtsystem HE lässt sich durch die Adaption dieser theoretischen Erkenntnisse besser verstehen und visualisieren. Eine Zunahme von Komplexität betrifft mittlerweile alle Lebensbereiche (Sargut & McCrath, 2011). Auch HEI als komplexe, international agierende Systeme sehen sich mit massiven Veränderungen im Zuge von beispielsweise Digitalisierung, Massification, Internationalisierung und daraus resultierendem, erhöhten Wettbewerbsdruck konfrontiert – um lediglich einige zu nennen. Umso wichtiger erscheinen bei genauer Betrachtung dieser Phänomene geeignete

Management-Tools und Modelle, die komplexes Systemverständnis ermöglichen und vereinfachen.

Durch die in einem weiteren Conceptual Paper präsentierte Entwicklung des Higher Education Strategy Models (HESM) und den darin integrierten, übergeordneten strategischen Zielen von Hochschulbildung in Form von vier Basiskompetenzen, wurde ein allgemeiner Denkrahmen für Wertschöpfungszusammenhänge unter Berücksichtigung der Akteure Gesellschaft, Staat, HEI und Studierende geschaffen (siehe Publikation 2).

Im finalen Beitrag wurde schließlich die eingangs entwickelte theoretische Logik im spezifischen Kontext der Executive Education in einem qualitativ-empirischen Beitrag angewandt. Daraus wurde eine Navigations- und Orientierungshilfe in Form des Management-Tools Strategy Map für Higher Education-Entscheider wie beispielsweise UniversitätspräsidentInnen entwickelt. Eine solche Map visualisiert die als Serviceplattform betrachtete Executive Education und gibt durch die Darstellung relevanter Ursache-Wirkungszusammenhänge auf modifizierten Ebenen Aufschluss über die Ziele von Studierenden. Letztere beziehen sich auf deren Zufriedenheit von der ersten Information über ein Studienangebot bis hin zum Studienabschluss und sogar darüber hinaus. Zusätzlich integriert die EESM die in ExpertInneninterviews erhobenen Perspektiven von UniversitätspräsidentInnen hinsichtlich strategisch relevanter Kennzahlen für das Management von HEI.

Durch eine Orientierung an Erkenntnissen zu kompetenzorientierten Prüfungsformen wird darüber hinaus eine Möglichkeit zur sanften Implementierung der übergeordneten strategischen Ziele in das Studienprogramm vorgeschlagen. Der nächste logische Forschungsschritt ist die auf der EESM basierende, konkrete Gestaltung eines hochwertigen Kennzahlensystems. Dies kann beispielsweise in Form einer modifizierten Balanced Scorecard zur Messung, Dokumentation und Steuerung der Aktivitäten im Rahmen eines Executive Education-Programms geschehen.

Beiträge zum strategischen Management von HEI sind angesichts erhöhter Komplexität aufgrund aktueller sowie zukünftiger technologischer und sozialer Entwicklungen von besonderer Relevanz und Dringlichkeit. Dieser Umstand wurde zudem von zahlreichen internationalen HE-ExpertInnen auf den vom Autor besuchten, internationalen Fachkonferenzen bestätigt. HEI dürfen sich dem Wandel der Zeit nicht nur widerwillig und verzögert anpassen. Sie müssen vielmehr versuchen, im Sinne einer Aufspürhaltung entsprechende Strategien bereits frühzeitig zu entwickeln, um schnell und flexibel auf Herausforderungen reagieren zu können. Diese Dissertation leistet diesbezüglich einen wichtigen Beitrag, indem sie auf theoretisch-konzeptionellem, wie auch empirischem

Wege strategische Management-Tools und Modelle für ein holistisches Systemverständnis und zur Komplexitätsreduktion entwickelt. Somit liefert sie eine neue Analysegrundlage für Higher Education-Phänomene und erleichtert das Verständnis von Zusammenhängen und Zielen der wichtigsten Hochschulbildungsakteure.

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Value Configuration in Higher Education – Intermediate Tool Development for Teaching in Complex Uncertain Environments and Developing a Higher Education Value Framework (Conceptual Paper)

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Cite as:

Wawrzinek, D., Ellert, G., & Germelmann, C. C. (2017). Value Configuration in Higher Education–Intermediate Tool Development for Teaching in Complex Uncertain Environments and Developing a Higher Education Value Framework. *Athens Journal of Education*, 4(3), 271-291.

This paper was published in the *Athens Journal of Education*, 4(3), 271-291 (peer reviewed), available online: <https://www.athensjournals.gr/education/2017-4-3-5-Wawrzinek.pdf>

Abstract

This conceptual paper addresses the issue of value creation in the field of higher education and pre-sents a new theoretical perspective by assigning the Service Dominant Logic (SD-logic) and developing a higher education value framework, consisting of ten "foundational premises" for a better understanding of higher education phenomena. Furthermore, based on the theoretical findings this paper presents the Empirical Research Map as a holistic, intermediate learning-und teaching-tool that provides a navigational aid through the entire socio-scientific empirical research process and visualizes all interlinked research steps on a single DIN-A-3-sheet. The empirical research process is affected by high complexity and thus uncertainty. Students have to make many decisions and have problems in anticipating long-range and secondary effects. From a didactic perspective, the Empirical Research Map facilitates making important decisions, the anticipation of long-range and secondary effects and therefore provides additional value to researchers, teachers and students in the social sciences.

Keywords: higher education, intermediate teaching tool, mapping, psychology of learning, service, value configurations, visualization.

Introduction – Growth of Complexity in Higher Education as General Context

According to a study, titled "Overstrained, disappointed, wrong decision or strategically - A typology of prematurely exmatriculated Bachelor students" (Blüthmann, Lepa, & Thiel 2012) 25 percent of polled, prematurely exmatriculated students stated being overstrained. These students lack general learning skills and subject-specific skills, and have also failed an above average number of tests. Through the structural changes in the European higher education landscape in the course of the Bologna process, and the concomitant introduction of the bachelor and master degree programs, as well as the efforts to establish a single European higher education area, the complexity of studying has increased additionally, inter alia because of work overload, increased testing density, obligatory stays abroad, a lack of time and too much content choice (Blüthmann, Lepa, & Thiel, 2012, p.10). At this juncture, students have to be able to put together independently, individual cognitive modules so as to form and understand an overall system or course of studies, in order to avoid failing. According to Kainz (2011, p.73) students complain about curriculum overload, increased stress and pressure. Wörfel, Gusy and Lohmann (2015, p. 49) in turn state that during the study period dealing, with one's own inadequacies and failures is of particular relevance, since students, also because of the Bologna reform, are

subjected to significant performance pressure and are exposed to critical feedback. Hence, innovative and systematic teaching and learning processes and appropriate tools for understanding a system seem to become even more important for managing this increased complexity at the best. Higher education is facing an intense process of change, with rising complexity within academic education, as it becomes increasingly specialized and fragmented. At the same time, new, ever more sophisticated and rapidly changing occupational fields arise, to which higher education facilities have to respond with suitable up-to-date offers that provide a current connection to practice. A good example is the occupational field of “Media Management”, in which academically mediated, content timeliness and relevance is characterized in many areas by a very short half-life. Generally, it can be said that in a globalized and dynamized world, increased complexity now affects all areas of life. Specifically, the working environments are increasingly complex - with the aim of making things easy for customers. Sargut and Gunter McCrath (2011) explain this scenario in terms of the information technology revolution. According to Castells (2010), this began in the US around 1970, is progressing at breakneck speed, accelerating globally and has expanded into all spheres of social and economic activity. In addition, a new form of industrialization (industry 4.0, the Internet of Things) is arising, and advanced I & C technologies and a new quality of informatization (Boes, Kämpf, & Marrs 2013, p.3) lead to fundamental changes, bringing new and major challenges. Increased complexity results in decisions being more difficult to make, because the anticipation of effects becomes ever more complicated. Thus, the more complex a system, the more difficult and serious an actor’s decisions seem and may really be, because “it is very difficult, if not impossible, for an individual decision maker to see an entire complex system” (Sargut & Gunter McCrath 2011). At the same time, there is an increasing risk of making mistakes with surprising, unpredictable and unintended consequences, which in extreme cases lead to failure. In this respect models are useful that consider the potential consequences and capture all dimensions of risk. In management, therefore, tools such as the balanced scorecard (see, e.g., Kaplan & Norton 1997) have been developed to reduce complexity in organizations and to deal with it more effectively. However, Merton (2013) explains, in his article about the evaluation of opportunities and risks of innovations, that “our ability to create models rich enough to capture all dimensions of risk is limited”. Achi and Garvey Berger (2015, p.3) reiterate that a new approach, which deals with complex challenges requires breaking out of familiar structures. Considering these findings and developments, the question of an appropriate logic arises in this context. A logic that provides insights and has the potential to improve our understanding of higher education

issues and aids in the development of appropriate tools. Moreover, another research question is: What tools can be constructed that are suitable for reducing the complexity of teaching in the field of higher education, with the aim of facilitating decision making and helping students prevent failure? These questions will be answered in a two-step-methodical interdisciplinary approach. In the first step, we chose a qualitative research approach. Through several expert group discussions using Delphi technique, it was possible to develop the construct of a strategical higher education value framework. In a second step, the conceptual model of our higher education learning and teaching tool, the Empirical Research Map, is also developed in a qualitative research approach, adopting the logic of constructivism and interpretivism. Subsequently, the theory logic is explained, which forms the basis for the holistic model of the Empirical Research Map. This is a higher education- learning and teaching tool that provides an intermediate navigation aid through the entire socio-scientific empirical research process and visualizes all interlinked research steps on one DIN-A-3-sheet.

Theoretical logic for higher education

An appropriate and theoretically well-grounded new perspective on higher education is the Service Dominant Logic (SD-logic) (see, e.g., Vargo & Lusch, 2004; 2006; 2008; Lusch, 2011), which has its origins in Service Science, marked a turning point in thinking about economic exchange (Woratschek, Horbel, & Popp, 2014, p.11) and describes service as a "fundamental basis of exchange": "S-D logic establishes an alternative perspective for investigating exchange, which focuses on service – the application of competences for the benefit of another– as the central process for value creation" (Vargo, Lusch, & Akaka, 2010, p.137).

Higher education can also be seen as a service which is an "application of knowledge and skills" (Akaka et al., 2013, p.3), where value is generated collaboratively from a complex network of different actors including lecturers, students, services and administration staff within the framework of appropriate room facilities and teaching materials. Through "co-creation" (Vargo & Lusch, 2008, p.2), all involved internal and external stakeholders create value from the services offered by making the best use of their own resources and capabilities (see, e.g., Chandler & Vargo, 2011, p.40; Sheth & Uslay, 2007, p. 302-307). According to Ashill, Naumann, Sirdeshmukh and Williams (2013, p.9) "relational value is co-created when the parties involved ... combine their knowledge and skills in order to achieve higher performance than would be achieved by working independently". Higher education-training, irrespective of the subject area, is especially aimed at mediating four

basic skills for the future. These are understanding and mapping contiguous networks, problem-solving skills when networks are not involved, the ability to work collaboratively and finally, the mediation of ethical values.

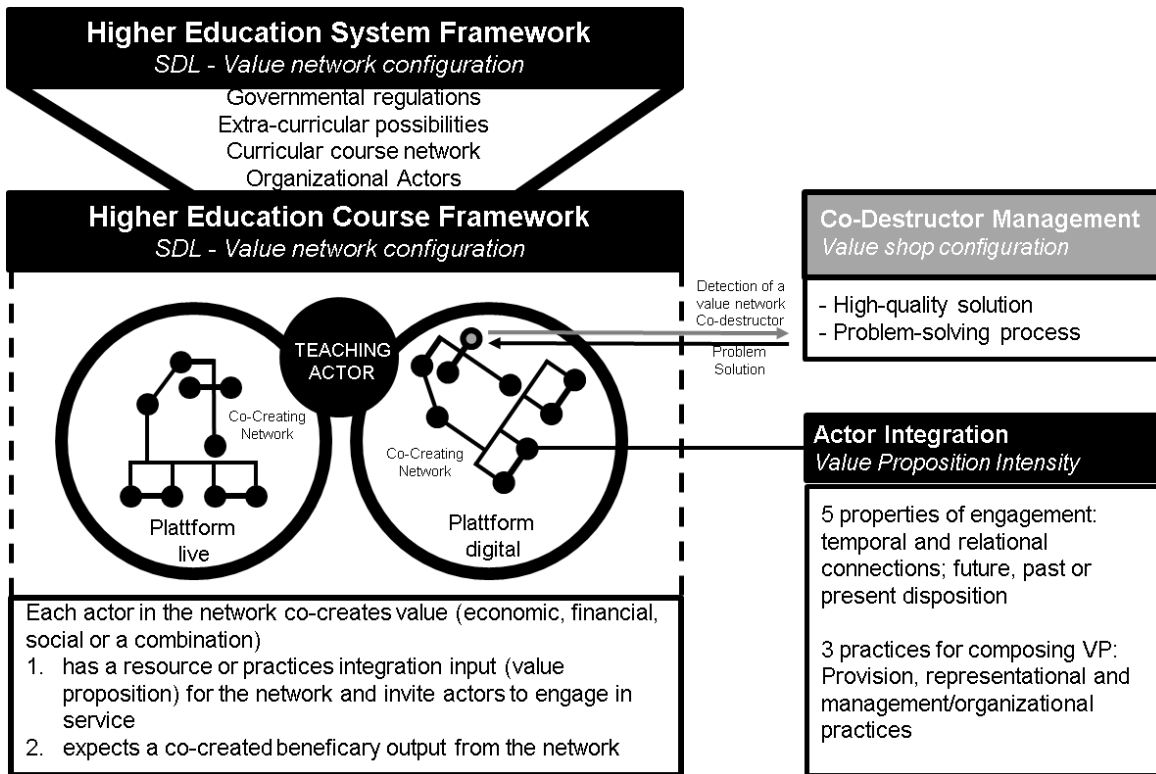


Figure 1. Higher Education System- and Course Framework

The value generated in this case is a collaborative learning and teaching process through the participation of diverse actors in education or teaching the relevant competences in order to achieve the training objective, based on the "value network". The three different value creation logics, also known as value configurations, are referred to variously as value chain, value network and value shop (see Porter, 1985; Thompson, 1967; Stabell & Fjeldstad, 1998, p.415). Chandler and Lusch (2015, p.8) define value propositions "as invitations from actors to one another to engage in service", and state that its intensity can be high or low, furthermore argue that "it is important to note that value propositions are not always successful ... because, nestled in a sea of value propositions, an actor can favorably reply to only a small number of value propositions". They also discuss engagement and propose that it has five properties and that "it is important to understand how value propositions invite engagement" (Chandler & Lusch, 2015, p.9). The three value configurations differentiate according to the order of required skills and activities of all stakeholders in the value-creation process. The aim is to generate additional value through different strategies (Amit & Zott, 2001, p.496). Similar to Sports Management, the purpose

of higher education facilities lies in linking the different stakeholders to another (Woratschek, Horbel, & Popp, 2014, p.16). Following this logic, it is necessary to consider that "single actors cannot create value at all because value is always the result of a collaborative process between various actors".

The Psychology of Learning

Learning psychology, which deals with how information is acquired, processed and stored, provides further important insights for a theoretical foundation of the Empirical Research Map. Learning is a psychological process within the long-term memory, of selecting and processing at four levels: cognitive, affective, conative and motoric (see Ellert, Schafmeister, Mueller, Dallwig, & Phelan, 2014). Rogers (2000, p.22) suggests that students learn in very different ways, and categorized three "types of learners": 1. Visual, 2. Auditory and 3. Kinesthetic or tactical: "Visual learners are stimulated most effectively by the use of a multi-sensory approach provided by movement, color, graphics and sound". Vester (2014), in turn, distinguishes between four types of learners: Auditory, visual, haptic and cognitive. Falk-Frühbrodt (2015), from the Institute for Learning and Advanced Training in Berlin, categorizes six types of learners: Auditory, visual, motoric, communicative, people-oriented and media-oriented. However, it should be noted that the learner type classification should be viewed with some caution. Quast (2011), for example, even denies the very existence of learner styles, because thitherto there, has been no empirical research on the identification of preferred learning styles by specific learning personalities. In addition, she emphasizes:

During the process of learning, success factors exert an influence, which is not reflected in the concept of learner types. These factors include, in particular, previous knowledge, as well as working memory capacity, intellectual prerequisites, the degree of self-efficacy, and motivational factors (e.g., achievement motivation) etc. (author's translation, Bildungsserver Rheinland Pfalz, 2015, p.3).

Since the learner-type categorization is controversial in the research literature, the latest psychological findings are applied at this point. Some are already in use successfully in sport psychology and allow a precise, empirically founded typology in "state-oriented" and "action-oriented" subjects (Kazén, Kaschel, & Kuhl, 2008, p. 693). This typology is extremely helpful in the categorization of learner types and the mediation of complex course content, because it offers, from a didactical perspective, new impetus for (re)action by higher education teaching staff, in order to respond more specifically to individual learner patterns of reception. While state-oriented individuals are characterized by extensive brooding over awkward situations and an unintentional fixation on one's own

situation, action-oriented individuals are characterized by early identification and the correction of one's own mistakes, and situation optimization through proactive behaviour (also see Kuhl, n.d.).

Applying this typology to our subsequently explained specific context, namely teaching complex empirical research processes, it can be concluded that it is probably more difficult for state-oriented students to find their way and to achieve their research goals. Excessive hesitation poses a threat to research, and state-oriented subjects in particular, run the risk of remaining too long at certain research stages, not effectively anticipating potential long-range and short-range effects, and thus suffering success setbacks, which, because of the lack of self-motivation, further intensify uncertainty.

Specific Context: The Socio-Scientific Empirical Research Process as a Complex System

Innovative, empirical research processes are characterized by particularly high complexity and intensity, thus acting as a reference context in the development of our tool. In deciding this, it was decisive for the quality criteria, that it is applied to as many students as possible, represents a complex system with high uncertainty (general context), is well suited to visualization through mapping techniques (see point "mapping techniques and visualizations reducing complexity") and is appropriate for our expert interviews. The above issues are relevant for our specific context, because, in almost all socio-scientific courses of study, there are empirical research modules among the basic ones, and therefore, they are an inherent part of academic basic education. Students are therefore usually confronted with empirical research processes in the first semesters of their undergraduate studies, have to make numerous decisions and familiarize themselves with a wide range of literature on the individual research steps. Often, they then fail, due to lack of overall system understanding and lack of anticipation of long-range and secondary effects. Clark, Howard and Early (2006, p.27) state that "one of the greatest challenges facing education today is to find more effective and efficient ways to support the learning of highly complex knowledge". The empirical research process, with all its links of multiple steps and components, processes and decisions, represents just such a form of highly complex knowledge. According to Sargut and McGrath (2011), complexity is challenging, because in general, actors need to deal with unintended consequences after making decisions and the difficulty is to grasp these consequences properly. At this point, it is important to note that, within a system, everything is linked to everything else and connected. Complex systems are characterized by Dörner (1979; 1983) in terms of four

key features: dynamism, transparency, polytely (multiplicity of objectives) and interconnectedness. If one of these variables is affected, this has long-range and secondary effects on all other variables within the system. The complexity of a segment of reality is higher, the more features are available, and the more features, the more they are interdependent (see Dörner, 2012). What happens when long-range and secondary effects in the empirical research process are not anticipated? Wrong decisions, wrong results, disappointment, frustration and in the worst case, complete failure are possible consequences. Increased task complexity may lead to motivation deficits and negative emotional responses for learners: "As task complexity increases, more learners experience negative emotional reactions and those who lack emotional self-regulatory skill, tend to become angry or depressed and distracted from learning goals" (Clark, Howard, & Early, 2006, p.32). On the way from identifying a changing context in social reality, defining research questions, choosing a research strategy- and method, to the point of solution-determination for the scientific and the business community, numerous decision options and obstacles have to be managed. A comprehensive (research) system understanding, awareness of their role as researchers and decision-makers, as well as problem solving competences, all appear. In considering these findings, it is all the more important to manage complexity and the associated uncertainties in the empirical research process.

How to Solve Complex Problems

The research area "Complex Problem Solving" provides helpful insights into solving complex problem processes during empirical research projects, through capturing them and on getting them under control (see Dörner, Drewes, & Reither, 1975; Broadbent, 1977; Dörner & Wearing, 1995). Frensch and Funke (1995, p.15), whose perspective is firmly rooted in the European tradition on complex problem solving, define it as follows:

Complex problem solving occurs to overcome barriers between a given state and a desired goal state by means of behavioral and/or cognitive, multi-step activities. The given state, goal state, and barriers between given state and goal state are complex, change dynamically during problem solving, and are intransparent. The exact properties of the given state, goal state, and barriers are unknown to the solver at the outset. CPS implies the efficient interaction between a solver and the situational requirements of the task, and involves a solver's cognitive, emotional, personal, and social abilities and knowledge.

The two authors also provide an accurate definition of what exactly constitutes a problem: "A problem must be a. novel, b. complex, c. dynamically changing over time, and d. intransparent". Another definition is provided by Fischer, Greiff and Funke (2012, p.22),

who state: "that 'barriers' between the given situation and the desired goal state, i.e., the lack of knowledge, can be further classified according to the amount of a. ignorance of the means/operations applicable, and b. lack of concreteness concerning the goal state". When solving complex problems, both "internal subject factors" (experience, cognitive and noncognitive variables) and "external factors" (problem structure, problem context and environmental factors) play a decisive role (Frensch & Funke, 1995, pp.20). When solving complex problems, Goldstone and Pizlo (2009, p.1) stress the influence of implicit and explicit knowledge and the associated systemic strategy. They describe a human problem-solving process as an interaction of cognition, emotion and conation that ultimately leads to the decision. Fischer, Greiff and Funke (2012, p.36) in turn outline the problem-solving process in three phases. Phase 1 initially deals with a problem and understanding the system. In the second phase, there is an analysis of the complexity and the associated long-range and secondary effects. The third phase finally implies action and control, entailing an understanding of effects. Furthermore they state: "In order to solve complex problems, people usually have to acquire and to apply knowledge about complex systems concerning the systems' structure and dynamics" (Fischer, Greiff, & Funke, 2012, p.20).

Uncertainty during Research Processes

Increased complexity causes increased uncertainty and at the same time, an increased occurrence of unforeseen problems. Generally, in today's network society (Castells, 2010), "unpredictable working conditions lead to an increase in personal crises" (translated from Zillien, 2009, p.49). This phenomenon of increasing uncertainty can also be applied to research in higher education. In their role as researchers, students are faced with numerous uncertainties and, for example, have to decide whether they need to conduct quantitative or qualitative research in order to achieve their research goals. In addition, the context and role of the researcher change, which entails rapid rethinking and considering the consequences of action in the context of problem-solving processes. As a research project always requires professional project management, findings from the research areas of projects, risk and uncertainty management are included below, so as to better analyze, structure and penetrate the uncertainties of the empirical research process. In general, it is human nature to seek security, "especially in the face of the unknown" (Achi & Berger, 2015). According to Van Horne (1966), there is some uncertainty as soon as the probability of a particular event is unknown. Researchers in the field of higher education have to accept this uncertainty during their research process and manage it adequately.

Ward and Chapman (2003, p.98) see, in uncertainty management, not only the management of perceptible opportunities, risks and their consequences: "It is about identifying and managing all the many sources of uncertainty which give rise to and shape our perceptions of threats and opportunities". It is also important to note that classic risk management differs from uncertainty management (Stoelsnes & Bea, 2005). Lokmann and Bash (1993, p.18) point out that uncertainty exists, when a past result of any event is unknown. Risk, however, reflects the likelihood of an unwanted result and has a limited focus on the management of project uncertainties. For this reason, Ward and Chapman (2003, p.105) suggest replacing the term "Project Risk Management" with "Project Uncertainty Management". The authors argue as follows:

A weakness in current PRM processes is that they are not readily focused on sources of operational variability in the performance of organizational activities. An "uncertainty management" perspective facilitates such a focus and also draws attention to the need to understand and manage variability in organizational activities that have an input into a number of projects.

In solving uncertainty, Achi and Berger (2015) suggest:

Uncertainty can't be solved with pat procedures; it takes new habits of mind to lead the possible. In our experience, three such habits stretch the capabilities of leaders and help them not only to lead the possible but also to delight in it.

These three approaches pose different questions, adopting multiple perspectives and systems.

Value Configurations: Higher Education as a Service

In particular the perspective adopted determines the respective value configuration (see Figure 2 "Higher Education Value Framework"). In this context, research, as a specialist area of activity within higher education is aimed at providing a "value shop" (Stabell & Fjeldstad, 1998, p.415), because the best possible answers to the research questions are primarily identified at the beginning of the research process, which always attempt to grasp a problem in the social reality. The value shop is the only logic to provide necessary solutions for protecting value creation within the educational network. In order to generate value, a value shop works cyclically and iteratively, instead of sequentially (Schafmeister & Ellert, 2013, p.92). The goal of a value shop, however, can only be achieved by a corresponding value network. Related to research, this value configuration implies, for example, collaboration and co-creation with other researchers who work on publications for the business or scientific community. The literature research and integration of existing information on a specific research topic is also relevant. The value network is characterized by the simultaneous interaction of the network actors, such as colleagues,

partners or customers, and generates competitive advantage through vertical and horizontal integration, which is produced by intermediation and co-creation tools (Stabell & Fjeldstad, 1998, p.413). The larger the researcher's network, the greater the impact. Due to a high number of network actors, however, the risk of unpredictable problems and the possibility of incapacitation increases. In order to manage and avoid uncertainties and problems that threaten the generation of value within the value network, researchers must often change the dominant value configuration. At this point, the value shop comes into action, by providing the necessary solutions to protect value creation within the network. From the logic of our theoretical framework described above (SD-logic, co-creation, value configuration value network, psychology of learning, state and action orientation), it is important to create a visual learning tool that provides both state- and action-oriented students with appropriate decision support, in complex systems and networks associated with increased uncertainty.

Mapping Techniques and Visualizations Reducing Complexity

In the context of developing the Empirical Research Map, we were looking for a suitable tool to map the entire empirical research process in all its complexity. The mapping technique and visualization proved to be especially suitable, because visualizations are very effective for understanding complex systems, anticipating long range and secondary effects and solving complex problems. More and more newspapers and magazines nowadays resort to infographics for the mediation and simplification of complex information. Knieper (1997, p. 584), for example, even calls for more "courage" in visualizing, because infographics increase the information potential of daily newspapers. Through visualization, complex issues can be received faster and better, taking into account the "KISS - Keep it simple and stupid" principle (Bingel, 2010, p.20). According to Klimsa (2002, p. 5) (translated from Bingel, 2010, p.10), "information coming via two input channels (eyes and ears) are positioned better". Ballstaedt (2012, p.20) argues that visualizations are "analytical pictures ... because they expose connections in reality". Furthermore, he states that pictures "are able to communicate content better than texts alone" (Ballstaedt, 2011, p.15). This fact is confirmed by learning- and cognition psychology research. Based on these and other findings from concept mapping and information design research, the Empirical Research Map was developed through co-creation. Concept Maps yield a structured representation of knowledge and information in a visual-spatial format (Cox, 1999, p.348). Tergan (2005, p. 1) attributes the development of Concept Mapping to Novak and Gowin (1984), who described it for the first time in their

book "Learning How to Learn": "Concept Maps are graphical representations, which are able to depict relations and hierarchies between elements" (Tergan, 2005, p. 2). Lima (2011, p. 12) again emphasizes:

Information visualization is widely used as a tool for understanding data – i.e., discovering patterns, connections, and structures. Since science is the area of human activity targeting the discovery of new knowledge about the world through systematic methods – such as experimentation, mathematical modeling, simulation – visualization now functions as another of these methods. What distinguishes this new method is that it also firmly belongs to design – it involves the *visual* presentation of data in a way that facilitates the perception of patterns.

To facilitate significant decisions, problem solving and the management of uncertainty in empirical research process for both state and action-oriented students, the Empirical Research Map was developed, based on the presented theoretical insights.

The Empirical Research Map is intended to provide useful preconditions for decisions from a holistic perspective, depicting the system in its entirety, enabling problem-solving processes with better system understanding, reducing complexity and enhancing the researcher's role perceptions. One fundamental point from Heuer (1999, p.20) refers to the importance of tools and techniques that gear the analyst's mind to apply higher levels of critical thinking [because they] can substantially improve analysis on complex issues on which information is incomplete, ambiguous, and often deliberately distorted. Key examples of such intellectual devices include techniques for structuring information, challenging assumptions, and exploring alternative interpretations.

By visualizing a systematically structured process and chunking information, the Empirical Research Map, as an intermediate tool, provides orientation and a navigation aid, since the associated long-range and secondary effects can be anticipated better and, in changing contexts, one can react more quickly so to as ultimately achieve the research goals in a safe way. From a didactic perspective, the Empirical Research Map offers additional value to researching and teaching researchers and students, taking into account the six basic principles of visualization: color, uniformity, shortness, order, suitability and simplicity (Bingel, 2010, p.19).

Methodology for the Construction of the Higher Education Value Framework

For the construction of our higher education value framework, a qualitative research approach was chosen. By using Delphi technique for expert group discussions, it was possible to gain useful insights and new perspective on higher education. After extensive interviews with in total seven experts from different scientific fields (e.g. service science,

psychology, general management, higher education and business studies), we were able to discover and then to adapt the following framework from service science in the context of higher education.

Outcome: The Higher Education Value Framework

As already described above, the SD-logic provides insights that have the potential to improve our understanding of higher education issues and, as shown further down, aid in the development of appropriate tools. We therefore use the SD-logic as a theoretical foundation for our conceptual model and aim to propose, based on Woratschek, Horbel and Popp's (2014, p.12) "Sport Value Framework", a "Higher Education Value Framework" that enables a thorough understanding of higher education phenomena. This framework consists of ten foundational premises, which are described below in Figure 2.

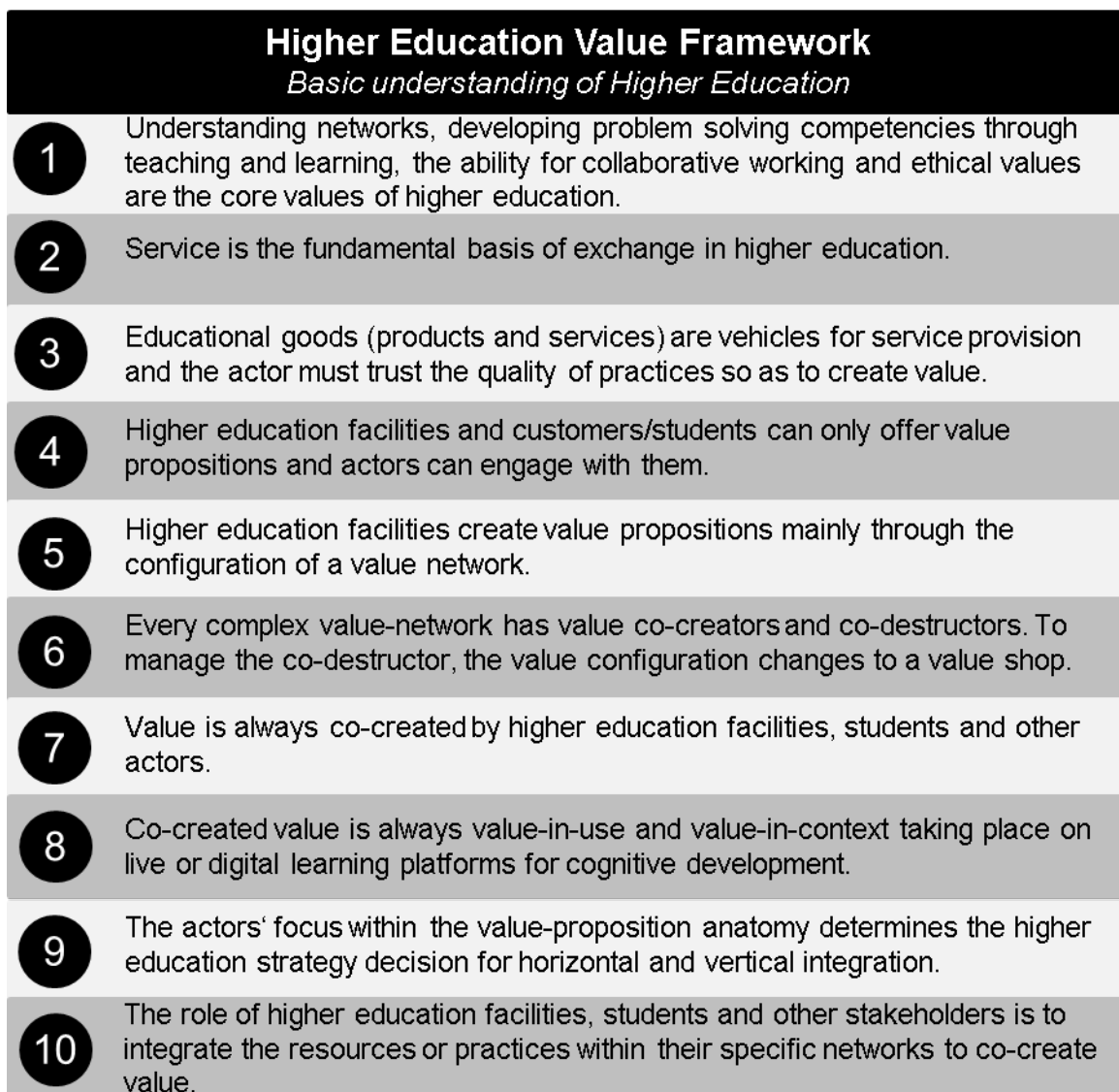


Figure 2. The Higher Education Value Framework

1. In an increasingly complex, progressively networked and more uncertain world in which knowledge, job descriptions and requirements and consequently education programs have an ever shorter half-life, a comprehensive system and network understanding, problem-solving skills and the ability to work collaboratively are of increasing importance. Higher education is characterized by equipping students with competences and ethical values for coping with an uncertain future.

These competences are conveyed on the basis of the configuration 'value network' through closely linked, collaborative teaching and learning processes and the interplay of many other stakeholders and learning environments.

2. As mentioned, service is, according to the SD-logic, the fundamental basis for exchange in the field of higher education. The SD-logic defines service "as the applied knowledge of the actors involved in value creation and sees it as the basis of all economic exchange" (Woratschek, Horbel, & Popp, 2014, p. 14).

3. Moreover, in the SD-logic applied knowledge is the reason why exchange exists, and why products (e.g. courses of study) and services are only one aspect of applied knowledge. Following this logic further and applying it to the field of higher education, education goods are "vehicles that convey the applied knowledge and skills of the actors involved" (Woratschek, Horbel, & Popp, 2014, p.14). They provide students "with the opportunity to achieve higher-order benefits or needs". The involved actors must also trust the quality of the methods, for value to be created.

4. Higher education facilities are also a platform for using all the involved actors as a means of providing their unique value configuration. The students' value configuration is, for example, that they shape the campus atmosphere decisively, through their physical presence, and enrollment decision, as well as through attending classes or events, getting involved, discussing, evaluating, reflecting, organizing, criticizing, acquiring skills and knowledge etc.

5. Point 5 in turn accesses the previously mentioned configuration value network, because only this value configuration is suitable for analysis and describes the value proposition of higher education facilities - in contrast to Porter's value chain - taking into account the abovementioned collaborative process and the networking of all actors.

6. According to Woratschek, Horbel and Popp (2014, p.17) through the interactions of customers, in our case, students, value is created within social groups as well. Not only at sports events, but also during academic studies, subjects often act within a group (e.g.

course or learning groups) or are influenced by others. In addition, students contribute through co-creation to shaping the reputation of a higher education Facility, for example, by recommending their alma mater. In addition, the presence and opinions of fellow students enhances to perceptions of service quality and consequently to perceptions of value propositions.

7. Value in higher education facilities always emerges from co-creation and the interaction of all involved actors. For example, students contribute to value creation by participating in the classroom, while lecturers and professors in turn make their contribution to through their experience, knowledge and skills. Higher education facilities create value by providing the facilities, personnel and appropriate educational offerings, which they actively promote, thereby communicating the values of higher education. Often, the parents of students also contribute to value creation by supporting their children in the choice of university or course of study, for example.

8. Value creation in higher education facilities always requires an interrelationship of different social actors, with varying and individual consequences. According to Woratschek, Horbel and Popp (2014, p.18) the generation of value is not merely the product of an act of purchase: "Every actor has to integrate his/her own resources with the value propositions of the other actors". Value creation is determined according to the motivations and specific interests of an actor. Since, moreover, value is derived from the actual use of a product or service, for example, by participating in class in higher education facilities on live or digital learning platforms, one talks of "value-in-use". Not to be disregarded is the context within value creation takes place. The context is crucial for the perceptions, significance and weighting of individual value creations, which can therefore vary from actor to actor. According to Woratschek, Horbel and Popp, "the resources that can potentially be integrated into the process of value co-creation depends on the specific context. Consequently, value propositions can be more valuable in one context, and less so in another". If one considers these findings and applies them to the field of higher education, a completely different value is created by frontal teaching in a crowded lecture hall, than in small groups with intensive supervision and the possibility of intensive exchange. However, in another course with a different content focus, this may be quite different.

9. Every actor has a specific or different focus within the value proposition anatomy (also see Skalen, Gummerus, von Koskull, & Magnusson, 2015, p.149), that determines higher education strategy decision for vertical and horizontal integration. To give an example: Students in a specific course might have to solve several problems (focus on "problem

solving"), while the lecturer focusses on knowledge sharing. In order to harmonize these two different value propositions, it is important to identify the different value propositions of the different actors in order to ensure high quality integration decisions and reactions.

10. The last aspect of the higher education value framework refers to the "network-with-network model of value creation" (Woratschek, Horbel, & Popp, 2014, p.19) and states that the role of all stakeholders in the field of higher education is that of integrating resources from specific networks, in order to create value through co-creation. Besides students, teaching staff and the service staff, lots of other stakeholders are integrated at universities, for example the state in the form of the Ministry of Science or project partners and employers from the free economy, to name just a few.

Methodology for the Construction of the Higher Education Learning and Teaching Tool

Based on qualitative research strategies (Merriam, 2009) and the above described value framework, the conceptual model of our higher education learning and teaching tool, the Empirical Research Map, in fact arises from non-empirical research. According to Selamat and Hashem (2008, p.41) "qualitative research approaches are designed to help researchers understand people and the social and cultural contexts within which they live". A qualitative research approach, as a first step, turned out to be the most perceptive way to construct this conceptual model. The following 12 steps adopt the logic of constructivism and interpretivism. The Empirical Research Map was developed from Selamat and Hashem's "qualitative decision trail":

1. Reading and writing different perspectives from didactics in higher education, the psychology of learning, project- and risk management, uncertainty management, concept mapping, information design, complex problem solving and value creation logic.
2. Hearing and writing different research on different perspectives
3. Connecting different elements to a mapping story and constructing central elements
4. Guiding conversations through the story
5. Hermeneutic interpretation - developing meaning with different theory elements
6. Learning through dialogue

7. Checking logic
8. Using extracts from the second guided conversation with respondents
9. Visually constructing different degrees of detail
10. Detailing a proofing circle for maximum value
11. Using guided conversations through visualization and reflecting on problems with experts
12. Final construction of the research map.

Step 11 describes a qualitative interview research approach. According to Hohl (1998, p. 496), qualitative interview methods are based on a hermeneutic understanding of science. This considers the human being as a meaning-constituting being who creates his concepts of life and situation interpretations in social relations and changes them in ongoing social negotiation processes. In expert interviews with 12 experts from six fields of the social sciences and humanities, which took between 30 to 120 minutes, new insights in terms of didactics in higher education and visualisations could be gained, in order to develop a conceptual model according to the socio-scientific empirical research process. The expert interview, used particularly often according to Meuser and Nagel (2009, p.465) in educational research, appeared to be a very suitable qualitative method for the construction of this conceptual model in this context.

Outcome: Higher Education Teaching- and Learning-Tool: The Empirical Research Map

The developers' intention is not to reinvent the research-wheel or to reject widely accepted findings. All elements included in the Empirical Research Map already existed and are discussed extensively in the literature. Rather, the aim is to bundle all process steps relevant for the research success in a strategically meaningful way, and to bring them together logically with a structure, and to depict them as one networked process. The Empirical Research Map depicts two fundamental processes that influence each other and that are both embedded in an ever-changing context:

1. The *research strategy*, which determines the role of the researcher for the process and also the type of research 'toolbox'.
2. The *research process*, beginning with the identification and formulation of research goals, up to the development of new tools and concepts for the working world, and

publications for the scientific community, which finally result in new phenomena and new research goals.

Lines, strokes and arrows show connections between the single steps of procedure and processes. A carefully chosen color system also shows the networking of the system, which in turn allows a better anticipation of long-range and secondary effects and play-through scenarios. For example, the researcher's role (research strategy "researcher role" - color code "orange") has an influence on the empirical approach (also displayed in orange). The Empirical Research Map can be downloaded under www.researchmap.info.

Implications and Conclusion

The authors are aware that holistic models in many social science disciplines are currently not 'state of the art', but rather focus on partial models that are then explored more deeply and developed further. However, the Empirical Research Map is well suited as a visualized holistic intermediate-model for understanding the research system in the social sciences, offering a navigational aid for both state- and action-oriented students. This facilitates the anticipation of long-range and secondary effects and also helps teachers in the field of higher education to convey complex system research more effectively to their students.

A further step has to be an empirical, comparative quantitative analysis method with multiple test groups, to determine whether research-specific questions can be answered more effectively with the Empirical Research Map as a teaching tool.

Implications for the field of higher education are as follows. The depth of understanding and reception of research education must be optimized with regard to the development of learning and teaching. Using SD-logic as a new perspective for a better understanding of higher education issues in general can be helpful and insightful.

In addition, in the field of higher education there is a need for new ways of dealing with increased complexity, anticipating long-range and secondary effects, as well as developing a conceptual model for decision facilitation in the research process. It should be noted that the Empiric Research Map covers only the socio-scientific research area, and excludes other scientific disciplines, not being suitable for their specific research processes. But also for other scientific disciplines, we recommend a holistic visualization, which makes it easier for students to gain an overall system understanding and to reduce complexity. Moreover, the rapidly advancing digitalization, with all its new requirements, usage habits and possibilities, must not be disregarded. The Empirical Research Map must "move with the

times" and continue to develop, also digitally, for example through interactive design and co-creation. Furthermore, the effectiveness of learning success by means of the Empirical Research Map, have to be measured empirically.

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What's the Purpose of Higher Education? Proposing Meso-Level Operationalizable Superordinate Strategic Goals for Higher Education Developing the Higher Education Strategy Model and Metrics (HESM & M)

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Cite as:

Wawrzinek, D., Ellert, G., & Germelmann, C. C. (2017). What's the Purpose of Higher Education? Proposing Meso-Level Operationalizable Superordinate Strategic Goals for Higher Education Developing the Higher Education Strategy Model and Metrics (HESM & M). *Journal of Education and Development*, 1(1), 12-23.

This paper was published in the *Journal of Education and Development*, 1(1), 12-23 (peer reviewed), available online: <http://journal.julypress.com/index.php/jed/article/view/233/194>

Abstract

This conceptual paper looks into the question of what purpose and which superordinate strategic goals can be identified for higher education. Because of the large variety of different purposes and goals in the existing literature, there's a need for integrative models and frameworks that help to manage the complex challenges which higher education is facing in an increasingly complex world. Based on the theoretical perspective of Service Dominant Logic (SD-logic), a holistic higher education strategy system model is presented, allowing higher education decision makers and managers a better understanding and consequently the measurement of strategical higher education goals. Irrespective of the branch of study, the HESM can be used as a decision-making aid in operative tasks regarding curriculum creation and optimization of teaching and learning contents.

Keywords: university leadership, university value management, higher education strategy

1. Introduction

1.1 Higher Education in a Rapidly Changing Environment Facing Increasing Complexity and Uncertainty

The social, economic and political relevance of higher education has become more and more important over recent decades, continues to increase significantly because of, among other things, internationalization and digitization and is in a constant flux with numerous future challenges. The British Council (2002, p. 4), for example, has defined “drivers of higher education demand to 2020,” which will reshape the global higher education landscape, as: “A combination of demographic and economic drivers, bilateral trade patterns, and shifts in inbound and outbound student flows linked to growing global competition and rapid expansion of tertiary education capacity ...”. In the last few decades, teaching and learning environments have changed dramatically. Feixas and Zellweger (2010, p. 88f.) list the following issues regarding the European higher education area: “Massification of higher education/widening access, changing student characteristics, technological innovations, Bologna-implied challenges and accountability/autonomy issues.” Moreover, Siemens (2015, p. 13) argues: “Student profiles are changing as the average entrance age increases, gender balances shift toward females as majority participants ... and the traditional full-time university student is no longer in the majority ...”. The challenges and topics that have to be considered by higher education institutions are manifold: These include whether they should be providing lifelong learning, information

and communication technology adoption into all levels of education, ubiquitous learning or collaborative learning, an international education as well as an affordable one (Ehlers & Schneckenberg, 2010, p. 3f.): “Higher education is facing new challenges that are influencing the way faculty teach and students learn” (Feixas & Zellweger, 2010, p. 87). In addition, another big challenge for today’s higher education is finding more efficient and effective ways for supporting the learning of highly complex knowledge (Clark, Howard, & Early, 2006, p. 27). Universities as “complex organizations” (Johnstone, 2008, p. 13) undergo a constant transformational process (Maric, 2013, p. 220) and have to deal with this increased complexity intensity, which is caused and intensified by digitization, globalization, demographic change and knowledge economy (ibid.). As shown, universities can be described as complex systems. According to Dörner (1979; 1983), complex systems are characterized by four key features: dynamism, transparency, polytely (multiplicity of objectives), and interconnectedness. These features are interdependent, so that if one of these features is altered, this change in the system has long-range and secondary effects on all other variables within the system. The complexity of a system increases, the more features are available. The more features exist, the more they are interdependent (see Dörner, 2012; Ellert, Germelmann, Schafmeister, & Wawrzinek, 2014). Complex systems do not let themselves to simple answers about what is right or wrong, but call for creative-innovative approaches to prevent failure. Solving complex problems requires that one accepts ambiguity and ignorance about all factors influencing outcomes. Indeed, these influencing factors can be characterized by constant change. Furthermore, increasing complexity leads increasing uncertainty. Hence, establishing resilient attitudes and structures, introducing an error culture, creating confidence, facilitating co-operations, identifying influencing factors or generating models becomes imperative. For managing complexity appropriately, the research area “complex problem solving” (Frensch & Funke, 1995) provides useful hints and several tools, such as, for example, the complexity star, the systemic loop, serpentine picking or the guided representation on the system board (Organisationsentwicklung, 2015, p. 34). Maric (2013, p. 223) analyzes the complexity of problems in managing higher education institutions and moreover emphasizes the necessity

to build a quality management system that respects the philosophy of Knowledge management, and they have to deal with problems of Human Resource management in relation to appearance and development of knowledge workers. Furthermore, the modality of stakeholders indicates the diversity and multidimensional environment that defines and determines a modern organization.

1.2 The Quest for Purpose

Given the multitude of these issues, the question arises, which goals and which purpose higher education actually does have today. The extent literature does not provide an answer to this question, but offers a vast range of approaches, perspectives, opinions and research results. Still, according to Chan, Brown and Ludlow (2014, p. 2) “limited research has explored the primary goals and purposes of higher education and to what extent college students develop skills and attributes ... at the completion of a bachelor’s degree in the 21st century”. They argue that students and higher education institutions have different and multifaceted main foci regarding education goals when getting a bachelor’s degree (Chan, Brown, & Ludlow, 2014, p. 6). While students’ expectations and goals can be characterized as “very instrumental and personal” (Chan, Brown, & Ludlow, 2014, p. 11), higher education facilities are characterized by “highly ideal life- and society-changing consequences” (ibid.). The discussion around higher education goals takes place in an area of conflict consisting of different views on what academia actually is. Kogan and Bleiklie (2007) distinguish between naming universities as former “republics of scholars” increasingly transforming to a “stakeholder organization.” The authors clarify two different ideals concerning the organization and governance of universities in an increasingly globalized world. While in the republic of scholars “leadership and decision-making are based on collegial decisions made by independent scholars,” this is not the case with a stakeholder organization: “Institutional autonomy is considered as a basis for strategic decision-making by leaders who see it as their primary task to satisfy the interests of major stakeholders and where the voice of academics within the institutions is but one among several stakeholders” (p.1). The transformation from a university as a republic of scholars to a stakeholder organization is characterized by increased international competition (Kamm, 2014, p. 17). This competition is driven by demographic and economic changes (Gibney, 2013), which produce a rapidly growing amount of students with an appropriate demand, reflected in an unbowed, worldwide growth boom of private, profit-orientated higher education institutions. This development is not bound to the Western hemisphere. According to Havergal (2015), for example, the number of private universities in Africa went up from 24 to an “estimated 468” during the period from 1990 to 2007. In general, according to Maric (2013, p. 1), these developments call for an increasingly entrepreneurial management style in higher education institutions. The issue of finding higher education’s purpose becomes even more pressing given estimations that the number of immatriculated students could increase from 178 million in 2010 to 262 million

by the year 2025. This will lead to changes in global higher education dynamics (Gibney, 2013). Not everyone sees these kind of developments positively. For example, Bok (2003) looks into the reasons for this paradigm shift in his work “Universities in the Marketplace: The Commercialization of Higher Education.” He shows the development of the American academic landscape and discusses his views on why education and research is increasingly commercialized, and moreover why universities are more and more becoming profit-oriented organizations that pose a threat to basic academic values. In contrast, Grünwald, Kopper and Pohl (2013, p. 34) see the so-called turbo-studies, which are often associated with the internationally assimilated system of bachelor and master studies, as a valuable contribution to that canon of skills that is also seen as the educational concept’s core by the advocates of patriarchal, humanistic educational traditions: the training of basic orientation skills in reality.

1.3 Selected Examples for Different Purposes and Higher Education Goal Perspectives

To gain insides into extant descriptions of higher education goals, a close inspection of the definitions and perspectives laid out in the existing literature is necessary. In the context of the 1998 world declaration on higher education for the twenty-first century, the UNESCO has set out different higher education tasks and duties in 17 articles. In this declaration, UNESCO points to the major problems and challenges for higher education facilities in the new century, for instance

financing, equity of conditions at access into and during the course of studies, improved staff development, skills-based training, enhancement and preservation of quality in teaching, research and services, relevance of programmes, employability of graduates, establishment of efficient co-operation agreements and equitable access to the benefits of international co-operation (UNESCO, 1998).

The declaration continues:

At the same time, higher education is being challenged by new opportunities relating to technologies that are improving the ways in which knowledge can be produced, managed, disseminated, accessed and controlled. Equitable access to these technologies should be ensured at all levels of education systems (UNESCO, 1998).

Today, the digitalization trend finds its most obvious materialization in the advent of massive open online courses (MOOCs). They represent a current trend that attained “tremendous coverage in mainstream media, traditional conferences and journals, and blogs and social media” (Siemens, 2015, p. 13). However, in this context Siemens points out that MOOCs “never were about higher education. They were a response to larger societal needs related to education and training” (ibid.). In fact, MOOCs are by-products of

the alpha trends “complexification and digitization of higher education” (ibid.), as well as a reaction to the learning subjects’ use requirements in an increasingly rapid, networked world. Referring to the country Great Britain, Schwartz (2013) points out that there is “still no consensus on the purpose of higher education” and does not find this surprising at all, as, there always has been a value collision regarding higher education purposes and goals. At the same time he advocates an “agreed set of social goals” and continues: “The answer is greater social justice. Universities contribute to a just society in two ways: by producing graduates who improve social life and by promoting social mobility.” The National Center for Public Policy and Higher Education (1998) in the United States mentions three primary purposes of higher education:

To promote citizenship ... preparing people to be good human beings, to be good members of families, to be the kind of parents and spouses we ought to be in our families and communities and ... educating people with world-competitive skills.

To give an example from the European context, the Federal Ministry of Education and Research in Germany emphasizes the importance of sustainability in higher education and its development. The Ministry calls for the adoption of the sustainability principle into the higher education development strategy and concept (2004, p. 16). Adding to the idea of sustainability, Bringle and Hatcher (1996, p. 236) develop the idea of universities as institutions actively engaging in co-creating value with students, but also communities as resource integrators: “Virtually all universities are interested in committing their resources to develop effective citizenship among their students, to address complex needs in their communities through the application of knowledge, and to form creative partnerships between the university and the community”. In consideration of higher education goals, Chan, Brown and Ludlow (2014) have carried out an extensive analysis of the North American higher education landscape regarding basic competencies, skills, abilities and the willingness to graduate with a bachelor’s degree. Because of the higher education industry’s global nature, the analysis’s findings are also applicable outside of this specific context. Using critical interpretive synthesis, the researchers have compared institutional perspectives with student perspectives regarding goals and purposes for graduating with a bachelor’s degree. In total, there are nine main motives: “Social democratic values and action—civic engagement; advanced intellectual skills; advanced communication skills; interpersonal skills; vocational & employment preparedness; personal life quality enhancement; personal integrity; graduate school education preparedness; and family expectations/reasons” (2014, p. 9). Furthermore, the results indicate that

higher education institutions have placed heavy emphasis on much larger and grander objectives to do with reforming society and the classic individual cognitive and communicative agendas. In contrast, undergraduate students appear to focus much more on personal economic, family, and personal development goals.

The different goals and purposes on both sides underline the need for integrative models and frameworks that help to manage the complex challenges which universities but also other stakeholders in higher education face.

1.4 Literature Review: Developing the Higher Education Strategy Model and Metrics (HESM & M)

Our conceptual model's theoretical basis is the service-dominant logic (Akaka, Vargo, & Wieland, 2017; Wawrzinek, Ellert, & Germelmann, 2017; Vargo & Lusch, 2016; Chandler & Lusch, 2015). With the use of a service scientific perspective, higher education can be analyzed as a service that "involves multiple processes of interactions among many different actors" (Chandler & Lusch, 2015, p. 6). Furthermore, our conceptual model draws from theoretical findings coming from visualization research (cf. Burkhard, 2007; Ellert, Germelmann, Schafmeister, & Wawrzinek, 2014). In order to reduce a system's complexity and also to simplify its understanding, visualizations are particularly suitable. Because the amount of available information has been increasing steadily for years, working processes have been speeded up and content has been rapidly changing, a systematic exposure to information is an essential factor of success for knowledge workers (Burkhard, 2007, p. 84). Because of this, we have considered findings from the areas of knowledge-, information- and concept-mapping (cf. Lima, 2011; Tergan, 2005), as well as from visualization research during the development of our conceptual model. According to Burkhard (2007, p. 87), the amount of information and consequently the problem of an information overload is enormous. In general, contents are becoming more and more complex and, very often, several persons are involved. Therefore, contents increasingly have to be completed geared to the target group for a better understanding. Visual solutions are helpful in this case. Moreover, this perspective brings together findings from strategic management literature (cf. Hungenberg, 2008; Tabatoni & Barblan, 2000; Porter, 1996), learning psychology (cf. Ellert et al., 2014) and complexity research (cf. Maric, 2013; Dörner, 2012; Clark, Howard, & Early, 2006). Consequently, the model's theoretical framework is interdisciplinary. In pursuance of Holländer (2003, p. 1f.), interdisciplinary research is increasingly demanded by science policy. The author believes that the demand for interdisciplinarity is also a reaction to the deficits of disciplinary research and their

contribution to the handling of complex, societal problems. As described under “1.2 The Quest for Purpose”, the extant literature does not provide a satisfying answer to the question, which generalizable goals and which purpose higher education actually does have today (cf. for example, Chan, Brown, & Ludlow, 2014; Schwartz, 2013; Kogan & Bleiklie, 2007; UNESCO, 1998). Considering the vast range of opinions (see “1.3 Selected Examples for Different Purposes and Higher Education Goal Perspectives”) in the existing literature and recent research foci in the area of higher education, which primarily are set on an operational level, there are hardly papers dealing with this particular issue. These insights clearly show the need for further investigation. Research findings from the above described fields represent the theoretical basis for our strategy model. The consideration and integration of findings from these research areas into the field of higher education allow a new perspective and the construction of a holistic system model for a better understanding and consequently the measurement of strategical higher education goals. Below after “2. Method”, the single parts and the connections inside the strategy model are described more specifically under consideration of the particular theory findings. Importantly, we clearly differentiate between strategy and operative tasks. This differentiation allows for the development of metrics that can be used to measure the extent to which the higher education goals have been reached.

This paper does not adopt a normative position on which developments are positive or negative for academia. Instead, this paper proposes a conceptual model that arranges and categorizes existing findings regarding the purpose and goals of higher education. The presented model aims at providing a holistic, strategic orientation aid for higher education decision-makers. Such orientation would facilitate system understanding, strategy making, measurement of strategic goals and the development of suitable operative tasks.

2. Method

There is a qualitative research strategy underlying our strategy model. This research strategy in turn implies a genuine epistemological, constructivist and interpretative position (Moser, 2014, p. 13), which aims at generating theory and constructing hypothesis (Ellert et al., 2014). A qualitative research approach with principles like, for example, openness, reflexivity of object and analysis, as well as explication and flexibility (Lamnek, 2005, p. 19) appears to be suitable for developing a holistic logic out of single parts and also for reconstructing structures that in turn provide the possibility of a quantitative follow-up survey. In qualitative expert interviews within a workshop situation, with altogether eight

experts (defined as someone who possesses comprehensive and area-specific knowledge and skills) and practitioners from the fields of management, higher education, service sciences and psychology, new insights in terms of purposes, goals and values of higher education were able to be gained in order to develop the presented strategy model. The expert interview, which is used, according to Meuser and Nagel (2009, p. 465), inter alia in educational research particularly often, appeared to be a particularly suitable qualitative method for the construction of this conceptual model in this context. The fact that expert interviews are aimed at the generation of area-specific and object theoretical propositions and not at analyzing basic rules of social action, or rather universal constitutive structures, was crucial for choosing this qualitative approach in the form of expert interviews (Meuser & Nagel, 1991, p. 466). Thus, it is possible to appropriately analyze the knowledge in terms of experience rules regarding higher education operations. Furthermore, every single expert was able to provide their expertise and to depict and refine their understanding of the strategy model and relevant connections directly by means of a sequential mapping method. The sequential mapping method results' essence gave rise to the subsequently depicted strategy model and further research questions (see "Research Agenda and Practical Implications").

3. The Higher Education Strategy Model (HESM)

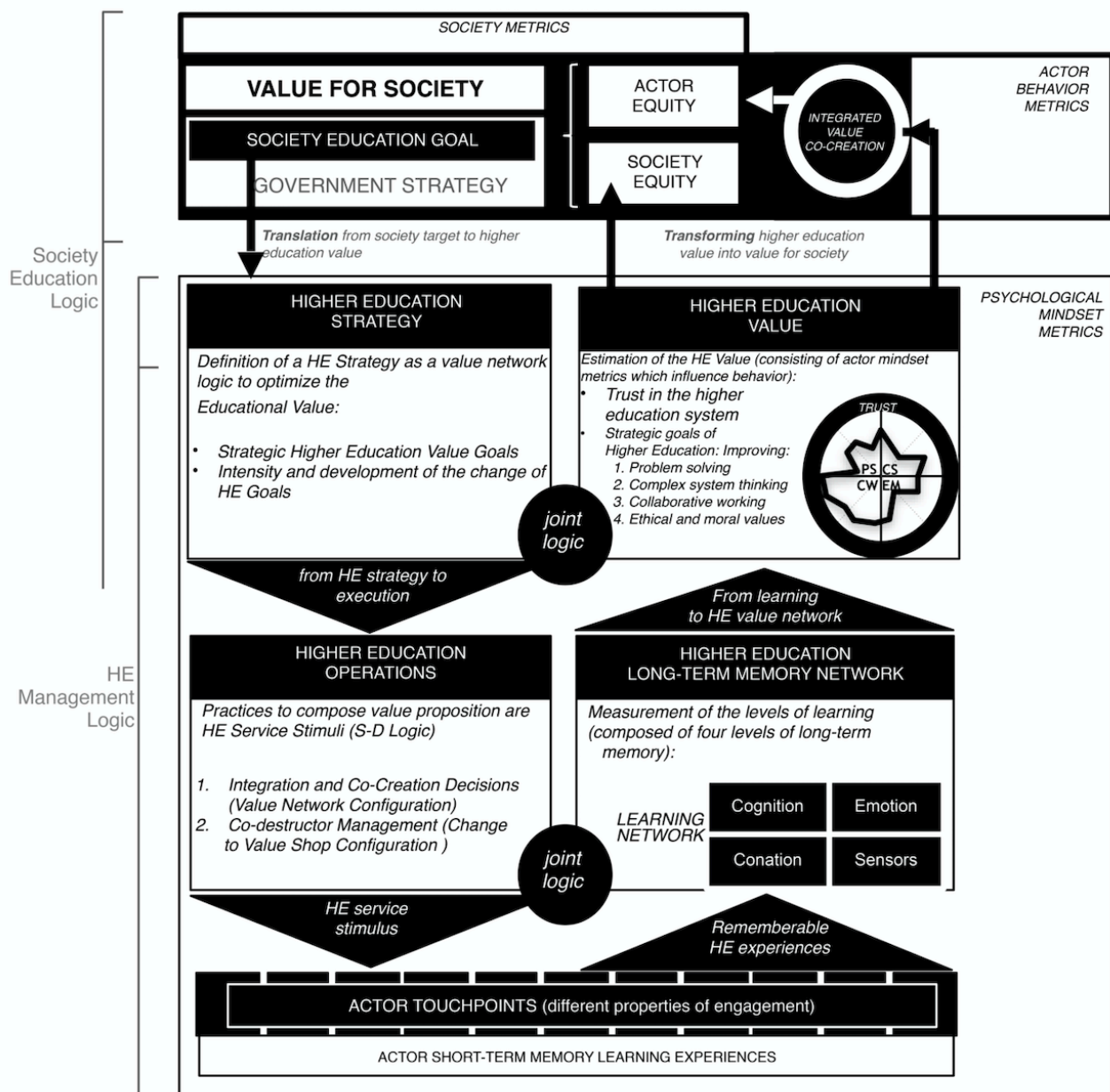


Figure 1. Higher education strategy model

Value for society in a changing environment. The model’s upper part represents higher education’s value for society in a constantly changing context. This value is generally promoted, demanded and defined by the particular State Department of Education through a government strategy (see for example, Hill, Hoffmann, & Rex, 2005, p. 1ff.). The Irish government, for example, has published a national strategy paper entitled “National Strategy for Higher Education to 2030—Report of the Strategy Group.” It says: “This strategy is framed against a range of new challenges that are facing higher education. The

capacity of higher education has doubled over the past twenty years and will have to double again over the next twenty” (Department of Education and Skills Ireland, 2011, p. 10). Governments have recognized the importance of higher education promotion and therefore increasingly invest in it.

Using the example of the USA, Lonanecker (2003) gives the following reasons:

First, the federal government supports and directs two types of activities within higher education where it believes there is a primary federal responsibility: assuring access to postsecondary education and sustaining basic and applied research that is in the national interest. Second, the federal government provides support, generally more modest, in areas where there is a clear federal interest even though it is not primarily a federal responsibility.

Since 2005, the German government has been continuously increasing its investments in education and research. In contrast to almost all other European countries, in which educational investments have simply remained constant, or have even partially shrunk, the German government will invest over 17 billion euros in education until the year 2017 (German Government, 2015). Using another example from China, Yakunin (1990) shows that investing in higher education is paying off: “China began investing seriously in its universities in the mid-1990s, and its position in current league tables demonstrates that its efforts are paying off.” Universities UK (2013) mentions yet another reason why governments have to invest in universities: “Strong universities create jobs, attract investment, and are essential to the future competitiveness ... Skilled graduates are in demand, while jobs for the less qualified are disappearing ... Universities are efficient and deliver an impressive return on public investment.”

Higher education strategy. To attain and meet higher education society goals and benefits at the highest level, universities, as organizations that “are being pushed forward by competitiveness” (Maric, 2013, p. 217), have to implement appropriate strategies with goals that ideally can be measured. At this point it is initially meaningful to highlight what exactly characterizes strategy respectively strategic management and what characteristics it has, because the implementation of strategies is one of strategic management’s main tasks. Very often, strategy is intermixed with operative activities, respectively “operational effectiveness” (Porter, 1996, p. 2) and there is no clear differentiation. While the latter means that activities and tasks like, for example, creation or selling services run better, faster and more smoothly than that of rivals, “strategic positioning attempts to achieve sustainable competitive advantage by preserving what is distinctive ... It means performing different activities from rivals, or performing similar activities in different ways” (ibid., p. 3).

Universities are “learning systems” (Tabatoni & Barblan, 2000, p. 5), in which “strategic management becomes the educating process of change agents, the institutional actors” (ibid.). According to Hungenberg (2008, p. 3), contents, methods and theory perspectives differ in the literature when it comes to strategic management. However, a basic understanding of strategic management can be identified, which is reflected in the following aspects: Such management decisions are strategic that determine or significantly influence the corporate development’s basic direction. The purpose of strategic decisions is to ensure the corporation’s long-term success. Furthermore, strategic decisions try to ensure future success by determining the corporation’s external and internal direction (ibid., p. 4). Additionally, potential for success needs to be established and decisions need to be made from an overall perspective (ibid., p. 5). A holistic understanding of the system, which is provided by our higher education strategy model, is therefore essential for making the right decisions for an uncertain future with multifaceted, complex and often contradictory influencing factors of strategy decisions (ibid., p. 6). Another definition of strategic management is provided by Tabatoni and Barblan (p. 5). The authors state:

It aims at leading, driving and helping people, those inside the organization and those outside ... to focus on the organization’s identity and image, to question its worth in a new environment, to fix its longer term growth, while using its present capacity and fostering its ‘potential’ for development.

Universities are in a highly competitive, international environment and compete for the best students, research funds, reputation and scientific prestige. This is why universities have to orient their strategies increasingly to an international environment. According to Click (2006), international management is defined “as the process through which value is created by managers operating across a national border.” It is especially important to differentiate between individual higher education management strategies and goals in particular organizations (e.g. “an increase in school enrolment at location or campus x”) and general higher education strategies with relevance for society, to which our model relates (e.g., “Which graduate school program with which special training must increasingly be offered in a country?”). Considering our model, the particular university management strategy has to be geared to the higher education strategy that is normally formulated by the state.

Higher education value. The area “Higher Education Value” is intimately connected with the area “Higher Education Strategy” through a joint logic. From our point of view, the area “Higher Education Value” implies the four most important, general strategic higher education goals. Beneath these four strategic goals, almost all the already mentioned

higher education goals and purposes found in the literature can be subsumed. The basic strategic goals are: problem-solving competency, complex system thinking, collaborative working and ethical and moral values. If one considers the above-mentioned definitions of strategic management, like for example, decision-making regarding the influence of an organization's general direction, these four strategic higher education goals act as a kind of compass, affecting the direction for all strategic decision. Furthermore, the four basic strategical higher education goals are so-called key performance indicators, meaning characteristic factors referring to an organization's success or utilized capacity. Their purpose consists of performance measurement and control of processes, projects and divisions. To give an example: When a university wants to determine to what degree the students' problem-solving competencies are being developed, this can be measured by the didactical tool "case study." When the superordinate government strategy dictates a necessary increase in problem-solving competency, this can be compared via the depicted fingerprint and also be optimized and readjusted in the form of operative tasks, such as, for example, an added use of case studies in basic subjects. Taking account of the sustainability postulated by the German Federal Ministry of Education and Research as another example, all four strategic higher education goals can be compared and measured with respect to the superordinate government strategy goal: In what way are universities considering the aspect of sustainability regarding the imparting of problem-solving competency, complex system understanding and thinking, collaborative working as well as ethical and moral values in their curricula? When actual state and target state have been measured and compared to each other, appropriate actions for attaining the superordinate government strategy goals can be taken. Trust as an impact filter serves as a moderator or mediator in the strategic system.

Higher education operations. This area implies findings of the research area service sciences. Within this research area, the service-dominant logic was developed by Vargo and Lusch (2004; 2006; 2008; 2016). Service-dominant logic allows an understanding of value creation in higher education. According to this understanding, higher education is a service, which is "an application of knowledge and skills" (Akaka et al., 2013, p. 3), and creates value collaboratively in a complex network consisting of several actors, such as, for example, teaching staff, students or administrators. All of this happens within the framework of appropriate accommodations and teaching materials. Service-dominant logic deals with the interplay and the dominance of the three value configurations value chain, value network and value shop (see Porter 1985; Stabell & Fjeldstad, 1998, p. 415; Thompson, 1967). In the field of higher education, a value network is predominant whose

“logic is based on simultaneously linking customers that generate value by using mediation technology. The vertical and horizontal integration used here and supported by intermediation and co-creation tools keeps up the wanted competitive advantage in the market” (Ellert, Schafmeister, Wawrzinek, & Gassner, 2015, p. 61; Stabell & Fjeldstad, 1998, p. 413). Applying this logic in the context of higher education, it can be deduced that the value generated in this case in a collaborative learning and teaching process through participation of diverse actors is education, respectively teaching the relevant competences in order to achieve the four strategic higher education goals. The more complex a system, the higher is the probability of so-called co-destructors damaging and endangering the value network’s reliability. Take the class situation in an overcrowded lecture room as a simple example: There is the high probability of several students raising the acoustic level by constant chatting with their neighbour and consequently influencing other students’ concentration and reception of contents in a negative way.

Higher education long-term memory network. The area “Higher Education long-term memory network,” which considers the psychology of learning and helps in integrating and assigning strategical goals and derived operative tasks regarding possible learning psychology effects, is logically connected to the area “Higher Education Operations.” Learning is a psychological process that can be carried out within the long-term memory by selecting and processing at four levels: cognitive, affective, conative and motoric (see Ellert, Schafmeister, Mueller, Dallwig, & Phellan, 2014). Only when it is understood how information is acquired, processed and stored, is one able to take action and to give impulses that meet the four strategical higher education goals.

Actor touchpoints. This area shows the platform on which, and the frame within which actors create value through co-creation (value configuration value network). This value can either be generated “live” (e.g., all services in the lecture room during attendance courses) or digitally (services in online learning environments, e.g., online courses or MOOCs). Furthermore, certain impulses strike this platform and create memorable higher education experiences that are stored in the long-term brain and thus shall meet the strategical higher education goals. In addition, the actors’ engagement can show different properties. Chandler and Lusch (2015, p. 9) define five properties of engagement altogether: temporal connections, relational connections, future disposition, past disposition and present disposition. In addition, the authors point out “that engagement is based on both the connections of an actor and the psychological dispositions of an actor” (ibid.).

Explanation of the cycle. For being able to locate suitable operative tasks for the strategic goals' implementation, our cycle's logic follows a certain order, which is explained below. First of all, it has to be mentioned that higher education government strategies are different depending on the country. Nevertheless, we see the strategical goals as similarly important, generalizable and measurable dimensions that can be captured and measured in the form of key figures for all higher education facilities. If, for example, the governmental higher education strategy implies an increase in students' ethical and moral values regarding sustainability (Higher Education Value), this requirement influences the particular university's management strategy (Higher Education Strategy), which in turn is geared to the superordinate strategy, which is defined by the government. Subsequently, the logical-thinking guideline fades to the area "Higher Education Long-Term Memory Network," which in turn is directly linked to the area "Actor touchpoint", because only by a well-grounded understanding of how and on which platform (live or digital) information and the contents of teaching are stored in the long-term memory, can appropriate operative tasks, which reach the goals for generating an appropriate value for society and stakeholders, finally be defined.

4. Research Agenda and Practical Implications

With our cross-disciplinary approach we were able to develop a strategy model, but we are also aware of the need for future research into the service research areas time, actors and context. Summarized in Figure 2, we outline research questions in each of these areas to provide a research agenda toward a better understanding of the higher education strategy model.

FUTURE RESEARCH AGENDA	Research area TIME	Research area ACTORS	Research area CONTEXT
SOCIETY METRICS	Which KPIs indicating value generation in society in a chronological sequence need to be tracked?	How do the actors of the different scientific disciplines contribute and to what extent are there efficiency differences regarding the strategical goals?	How do the single strategical higher education goals influence the different areas of societal value creation?
STRATEGY METRICS	Which superordinate strategical goals have which effect rate?	How do actors adapt the correlations between the different strategic goals?	Are there possible co-destructors that can be identified within the context of strategic goals?
OPERATIONS METRICS	Which psychological–pedagogical services are chronologically particularly effective in order to achieve the superordinate, strategic goals?	How do actors transform long-term brain learning into strategical values?	Which processes are particularly effective in order to create service innovation in the field of higher education?

Figure 2. Research implications

The higher education strategy model provides a management tool for decision-makers in the field of academic policy and in higher education facilities. It facilitates a holistic understanding of the system and the measurement of strategic goals and multidisciplinary qualifications in a more and more complex, international and digital higher education environment. The four strategic goals, which are problem-solving, complex system thinking, collaborative working and ethical and moral values, are an attempt to bring together the diverse, partially very different competencies, goals and conceptions regarding higher education in the existing literature. Schaper, Schlömer and Paechter (2013), for example, name a central requirement in the context of the European academic reform of the Bologna process. It says that students should, in addition to professional-scientific competencies, acquire skills that enable them to adopt and adapt their academic knowledge to applied operational areas. Moreover, students should be able to reflect and enhance existing knowledge. The authors also stress that academic studies should contribute to the facilitation of interdisciplinary and multifunctional qualifications that create usable key competencies in career terms (e.g., skills in adopting self-organized knowledge or in working together with others collaboratively). By presenting our strategy model, these requested key competencies are determined in the form of strategic goals that have to be attained by every higher education facility. Irrespective of the branch of study, this model

can be used as a decision-making aid in operative tasks regarding curriculum creation and optimization of teaching and learning contents. This allows organizations to remain competitive and at the same time to live up to the particular government strategy.

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APPENDIX C: Publikation 3 (White Paper)

Mapping the Logic of Value in Higher Education - A Theoretical Adaption of Service-Dominant Logic and an Empirical Case Study in the Context of Executive Education.

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Mapping the Logic of Value in Higher Education: A Theoretical Adaption of Service-Dominant Logic and an Empirical Case Study in the Context of Executive Education

1. Introduction

Part-time Masters in Business Administration (MBA) enjoy international popularity. Globally, growing numbers of higher education institutions (HEI) offer MBA programmes as part of executive education. The latter is defined as “the process used to develop, expand or improve the capabilities of current senior leaders or to position individuals for future senior leadership roles within an organization” (Hura, 2012, p. 203). Moreover, executive education can be described as an aspect of academic business education. The demand for business education is high, Faridi and Kumar (2017) even considering it “the most challenging and exciting branch of higher education worldwide” (p. 257). However, other authors have identified a decline in demand for MBA programmes in most Western countries, alongside a substantial increase in countries including China and the United Arab Emirates (UAE) (Wilkins, He, Zhu, & Elmoshneb, 2018). In addition to classic MBA programmes at business schools, a growing number of subject-specific MBA programmes exist at universities, such as for physician executives, communication managers and sports managers, just to name a few.

What advantages do such courses of study offer to students? In the literature it is hypothesised that professionals or executives who study for an MBA programme often gain a “significant competitive advantage” (Turner, Stawicki, & Guo, 2017, p. 1655) by taking their career to a higher level. By acquiring and improving management and leadership skills as well as expanding business understanding, MBA students seek to meet the demands of the working world and compete for coveted leadership positions. Indeed, according to Hura (2012), MBAs and Executive MBAs are “an indicator of updated or expanded management skills ... as well as a retention strategy offered by companies for targeted talent” (p. 207).

The providers of MBA programmes face numerous complex challenges such as internationalisation, massification and digitisation (Enders, 2004; Han & Zhong, 2015; Kettunen, 2008; Manning, 2017; Wawrzinek, Ellert, & Germelmann, 2017a). They compete for the best applicants and students in a context of radical upheavals and changes in the global higher education landscape. This has resulted in the controversial “marketisation” (Judson & Taylor, 2004) of HEI and has also necessitated an increasingly entrepreneurial management style among university decision-makers. Strategic

management tools for controlling processes, decision-making and goal achievement and measurement are helpful when it comes to governing complexity and consequent uncertainties. A strategy map (Han & Zhong, 2015; Kaplan & Norton, 2004) thus represents a useful tool. This article specifically develops and describes a modified strategy map for the field of executive education.

This small-scale qualitative study uses a sample of MBA students at a German university in focus groups as well as a number of German university presidents in expert interviews. As a strategic management and navigation tool for decision-makers, a thematic analysis was implemented into an Executive Education Strategy Map (EESM). The key themes (goals) represent the different value drivers and value-added perspectives of the actors' society, university presidents and MBA students.

The theory-based evaluation matrix of the EESM combines findings from service sciences regarding value configurations, taking into account the Service-Dominant Logic (SD-logic) (Vargo 2018; Vargo & Lusch, 2016) and the co-creation paradigm (Ramaswamy & Ozcan, 2014; Horbel, Woratschek, & Popp, 2017). In addition, this contribution adapts the Means-End-theory approach from marketing and satisfaction research (Gutman, 1982). Furthermore, the following findings assemble insights from university didactic research concerning competence-oriented exams (Gaus, 2018), as well as strategic management and higher education research in relation to strategy maps. This interdisciplinary approach facilitates the identification and structuring of cause-effect correlations between the different actors, goals and levels. Therefore, it provides a suitable basis for a high-quality performance indicator system, such as in the form of a modified Balanced Scorecard (Woratschek, Roth, & Schafmeister, 2005) to manage and control executive education offerings.

2. Universities in a field of tension: internationalised competition, massification and marketisation trends

Universities find themselves in a market and competitive environment characterised by increasing internationalisation, globalisation and massification (Enders, 2004; Han & Zhong, 2015; Kettunen, 2008; Manning, 2017; Wawrzinek, Ellert, & Germelmann, 2017a). They compete for knowledge, students and funding (Organisation for Economic Co-operation and Development, 2003), are confronted with "strong external legitimacy challenges" (Dobbins & Knill, 2017, p.68) and enter into growing numbers of collaborations with industry partners and other universities. Enders (2004) emphasises the importance of

internationalisation for higher education (HE): “Internationalisation is contributing to, if not leading, a process of rethinking the social, cultural and economic roles of higher education and their configuration in national systems of higher education” (p. 362). Moreover, the rapidly progressing development of new technologies is also significantly altering traditional understandings of university teaching: “The communication, teaching and knowledge dissemination currently available through computer technology is unparalleled” (Manning, 2017, n.p.).

According to Judson and Taylor (2014), another major development trend, at least in the United States of America (USA), is the “marketisation” of higher education. By this, the authors emphasise the increasing influence of market competition on academic life and the diminished relative importance of “student expectations”, “societal normative goals” and “intellectual development” (pp. 53-54). In other words, “[m]arketization creates an environment which focuses on performance goals (value co-creation)” (Judson & Taylor, 2014, p. 54). The authors consequently argue in favour of adopting a marketing perspective: “marketing theory and practice today instead rely on a service-based dominant logic which focuses on value co-creation and long term returns on marketing investments through relationship marketing” (Judson & Taylor, 2014, p. 52). This perspective supports the approach described in the theoretical part of this paper.

Another challenge concerns higher education policy, which varies from country to country. Increased pressure to reform and change (De Coster, Forsthuber, Oberheidt, Parveva, & Glass, 2008) and “transnational soft governance has unleashed the forces of change in higher education” (Dobbins & Knill, 2017, p. 67). Despite this transnational soft governance, at least in the European higher education sector, “individual HE systems are embedded in country-specific coordinative regimes” (Dobbins & Knill, 2017, p. 67), which means an additional management challenge for decision-makers and HE executives: they must meet both national and increasingly international requirements and interests. Universities or HEI formerly represented “republics of scholars” (Brubacher, 1967) but can now be described as stakeholder organisations (Amaral & Magalhaes, 2002) with an increasingly entrepreneurial management style (Maric, 2013). A growing orientation towards the “market oriented paradigm” (Dobbins & Knill, 2017, p. 74) is underway, albeit in different forms. All of these factors constitute complex challenges faced by universities, with important consequences for the strategic leadership work of higher education decision-makers.

3. The need for professional, strategic management tools in higher education

The higher education literature is recognising and progressively exploring the relevance of professional, strategic management tools in HEI. For example, Kettunen (2008) highlights how the requirements imposed by politics on HEI also involve “effective and widely used management tools at the institutional level” (p. 1). HEI must increasingly develop strategies. It has to plan, implement, define and achieve goals as well as measure and optimise performance. This demand in the form of political guidelines can be demonstrated using the following example of Europe, published by the European Commission (De Coster et al., 2008): “The need for longer-term planning and strategy formulation for higher education is widely recognized across Europe. In several countries, they have an extensive policy document explaining their strategic policy concerning higher education” (p. 7). Strategic management, understood as “continuous planning, monitoring, and assessment of all that is necessary for an organization to meet its goals and objectives” (Jagero, Dabale, & Chakauya, 2014, p. 1), helps in meeting these requirements. Alternatively, as Kettunen (2008) argues in the context of higher education: “Strategic Management matches the changing education policy and the regional circumstances to the resources of the institution” (p. 323).

Han and Zhong (2015) have even noticed a lack of strategic management tools in HE, stating that “unlike for-profit organizations, universities generally have not employed scientific management tools and techniques to facilitate their strategic development” (p. 1). According to these authors, an effective use of strategy maps can benefit the management of universities in many ways. The modified strategy map developed in this article in the context of executive education is a concrete example of such a management tool. However, before going into more detail on strategy maps, one of the biggest management challenges will be addressed, namely the problem of linking the strategic and the operational level. This is necessary to understand why exactly a strategy map represents a particularly valuable strategy tool with numerous advantages to counteract this problem.

4. The problem of linking the strategic and operational levels

One of the biggest challenges in managing organisations is linking the operational and strategic levels. Yet this is crucial, as strategic planning is an important success factor for the management of organisations and “an effective way to look at a business as a system” (Steiner, 2008, p. 48). Nevertheless, the root cause of many management problems in the

“quest for productivity, quality, and speed” is, according to Porter (2002), “the failure to distinguish between operational effectiveness and strategy” (p. 10). It is necessary to be aware of the importance of both, but also to differentiate between their meanings for the business. Porter (2002) offers a precise definition of operational effectiveness, which is useful to understanding the problem described: operational effectiveness “means performing similar activities better than rivals perform them” (p. 11). In contrast, “competitive strategy is about being different” (Porter, 2008, p. 13). Being different is also an important goal for HEI under growing competitive pressure. In the context of corporate strategies, Kaplan and Norton (2008) suggest that companies often lose focus due to the plethora of strategic and operational tools, and “still lack a theory or framework to guide the successful integration of the many tools” (p. 7). According to these authors, missing is an “overarching management system” (Kaplan & Norton, 2008, p. 1). Thus, they have developed a management system approach with a total of six stages, linking strategy to operations (Kaplan & Norton, 2008). For HE management purposes, this system can be adapted very effectively, because it helps with implementing strategies and, in a second step, integrating strategy maps as a planning tool. Therefore, “a strategy map provides a one-page visual representation of all the strategic dimensions which we now call strategic themes” (Kaplan & Norton, 2008, p. 10). Interconnected goals are clustered into four to six strategic themes, which represent the strategy’s main components. Each of the key components can be individually planned and managed, but operationally they are still connected. In the next step, the goals defined in the strategy map can be converted into a Balanced Scorecard of “measures, targets and gaps” (Kaplan & Norton, 2008, p. 10). A major criticism concerning the classical Balanced Scorecard is the difficulty of formulating relationships. Hence, a lack of cause-and-effect relationships exists for organisational forms such as service providers. In addition, it has been criticised for there being fewer opportunities to capture networks as the system obtains value in chronological order equivalent to a value chain (Woratschek, Roth, & Schafmeister, 2005, p. 258). Given that in this article HEI are considered from a service-oriented perspective, this criticism proved helpful in developing the EESM. As demonstrated in the theoretical framework, the value configurations of value net and value shop predominate in higher education (Pastowski, 2004). They offer a suitable structural framework for the redesign and arrangement of the strategy map’s main levels. This modification facilitates a circumvention of the classical Balanced Scorecard’s disadvantages. It allows a clearer presentation of value creation in higher education, the corresponding cause-effect relationships and, in a subsequent step,

it also provides a suitable starting point for developing a modified Balanced Scorecard in future research.

5. Strategy maps as a strategic management tool in higher education

The management literature defines strategy maps as “a simplified visual presentation of the cause-and-effect relationships among the components of an organization’s strategy, and converts intangible assets into tangible outcomes” (Kaplan & Norton, 2004, p. 9). Han and Zhong (2015) emphasise that strategy maps “help to transform the internal governance structure of universities into a more collaborative and democratic one” (p. 940). Visualisations are generally very effective in reducing complexity and thus facilitating an understanding of complex processes and issues (Wawrzinek, Ellert, & Germelmann, 2017b). Strategy maps as overview and navigation tools are well-suited to successfully counteracting the problems described above with regard to linking operational excellence and strategic positioning. In addition, they are effective at presenting cause-and-effect relationships in the executive education service system in a clear and structured manner. Originating in the strategic management literature, strategy maps can be effectively adapted for HEI (Han & Zhong, 2015; Kettunen, 2008; Young & McConkey, 2009). Indeed, Young and McConkey (2009) describe how a strategy map has been developed at the University of Newcastle “to facilitate communication of the strategic plan within the organization” (p. 1). They also highlight numerous advantages of strategy maps, such as the possibility of communicating strategy to employees and stakeholders in a simple and clear manner, which is in the interest of every manager. Han and Zhong (2015) list other benefits of strategy maps: “First strategy maps enhance university management and promote good governance ...Second, a strategy map is not a rigid planning mechanism; it can be revised and adapted in response to society” (p. 940). This statement underlines the usefulness and flexibility of strategy maps in HE management. The authors also see strategy maps as a “powerful visualization tool for transforming intangible assets into tangible outcomes” for a university, “as a non-profit, service-oriented and intelligence-intensive organization”, whose most valuable resources are “intangible assets of culture, knowledge and human capital” (p. 941). These insights and perspectives in the existing management and HE literature further encouraged the author of this paper to continue with the modification of a classical strategy map for the context of executive education

6. Theoretical framework

After demonstrating the increasing importance of strategic management and corresponding tools for HEI, the following theoretical framework forms the basis for the EESM's evaluation matrix construct. This includes the Service Dominant Logic (SD-logic), the value creation configurations value network and value shop, and the value co-creation paradigm. Subsequently, the author discusses the Means-End-theory, which is popular in marketing research and determines the logic for filling the EESM.

6. 1 Service-Dominant Logic and value configurations in higher education

Service-Dominant Logic (SD-logic) (e.g. Vargo, 2018; Vargo & Lusch, 2004, 2008, 2016), a theory logic that has its roots in service science, defines service as a “fundamental basis of exchange” (Vargo, Maglio, & Akaka, 2008, p. 148) and additionally serves as an alternative perspective for the study of economic exchange. As a “holistic and integrated, metatheoretical framework” (Vargo, 2018, p. 733), it provides an alternative and helpful view of higher education phenomena (Lusch & Wu, 2012; Wawrzinek, Ellert, & Germelmann, 2017b). The difference between the terminologies service (singular), to which SD-logic refers, and services (plural) is crucial and must be taken into account for a basic understanding of SD-logic terminologies. Service is “an application of knowledge and skills” (Akaka et al., 2014, p. 2) and “is being viewed as the process of doing something for another person (or entity) that is beneficial” (Lusch & Wu, 2012, p. 2). Services, on the other hand, are referred to as “intangible units of output that a firm produces” (Lusch & Wu, 2012, p. 2). Lusch and Wu (2012) elaborately describe higher education through a “service science lens” in their contribution “A Service Science Perspective On Higher Education”. They argue that US universities concentrate excessively on the intangible units of output such as “producing credit hours or degrees efficiently ... rather than offering and providing a set of services - instruction, credentialing, career support, food services - that lead to these outputs (credit hours and degrees) as an end result” (Lusch & Wu, 2012, p. 3). This statement shows that adapting SD-logic in the context of higher education enables a better understanding of the responsibilities of HEI as well as facilitating classification of the roles, goals, relationships and needs of students and the other network actors involved. Lecturers, for example, are no longer seen merely as educational service providers, but additionally as resource integrators: “For this reason, in service-dominant logic, all individuals and entities are viewed as resource integrators or

service bundlers” (Lusch & Wu, 2012, p. 3). The value within the framework of the service executive education is in turn generated by co-creation, meaning the process by which all internal and external stakeholders create value from the services offered by making the best use of their own resources and capabilities (see e.g. Wawrzinek, Ellert, & Germelmann, 2017b; Woratschek & Popp, 2017). As an example, Lusch and Wu (2012) describe the student-lecturer relationship, which is in turn part of a “complex ecosystem” that goes far beyond the classroom and other material artefacts (tangible artefacts). In order to map the entire co-creation process, inter alia the infrastructure and transport connections by bus or rail must be included as well. Another important factor is technical infrastructure such as Internet connectivity. Lusch and Wu (2012) moreover point out that the “co-creative nature of value is dynamic and unfolds over time” (p. 4). The authors illustrate this insight by providing the example of a university degree, which has a “longitudinal and dynamic nature” (p. 5). Indeed, the value of a degree unfolds with time:

It is essential that higher education recognize that what the university produces on campus, in the classroom, or online and packages to create an output (a college degree) is only the starting point of a longer process that co-creates value. (Lusch & Wu, 2012, p. 5)

This results in important guidelines for higher education governance and university leadership in terms of networking. Cooperation is more important than ever in an increasingly internationalised university environment, or as Lusch and Wu (2012) suggest: “Strategy will increasingly be about joint ventures and collaboration in a system of open innovation and co-creation of value” (p. 8).

SD-logic provides a suitable and solid theoretical foundation and framework for understanding value creation in higher education. Furthermore, it helps in developing and optimising higher education governance strategies as well as tools. By adapting the SD-logic in the context of higher education and developing a “service mindset” (Lusch & Wu, 2012, p. 5), the interactive nature of higher education as a service can become better understood (also see for example the Higher Education Value Framework by Wawrzinek, Ellert, and Germelmann, 2017b). Another example for the adaption of this perspective is the Higher Education Strategy Model by Wawrzinek, Ellert, and Germelmann (2017a). This model integrates four superordinate strategic goals of higher education, enables decision-makers to better understand the ecosystem of higher education and considers the above definition of service as “applying knowledge and skills for the benefit of another person or entity” (Vargo, Maglio & Akaka, 2008, p. 145).

Through its superordinate strategic goals, the model provides a concrete approach to Lusch and Wu's (2012) demand for an "inventory of the knowledge and skills (talents) of its citizens" (p. 8).

Other authors such as Judson and Taylor (2014) have also analysed value co-creation in higher education, presenting general goals in a "proposed theoretical framework for faculty evaluations of marketing pedagogy" (p. 58). They argue for the maxim of lifelong learning by enhancing (for example) "cognitive abilities" or "moral development", stating that: "The collective goal for faculty and students alike must be to educate for a lifetime, not simply train for an immediate job opportunity" (p. 62).

The extent to which SD-logic enables a better understanding of value creation processes in higher education is additionally explained in the following. Consideration of value configurations are crucial in this connection. These outline the activities that are central for constructing value in organisations (Stadtelmann, Lindner, & Woratschek, 2015). The configurations value chain, value network and value shop are suitable for mapping "the way in which value is generated within the framework of service provision" (Popp, Horbel, & Woratschek, 2017, p. 508). However, taking into account the SD-logic and the value of the co-creation paradigm requires new consideration of value creation configurations, as established configurations such as the value chain are too provider-centred and neglect customers as co-creators: "From the perspective of the Service- Dominant Logic ... the value for the customer, however, only arises through the integration of the value propositions of other actors involved in value creation, including the provider" (Popp, Horbel, & Woratschek, 2017, p. 508)

In developing the strategy map described in this article, SD-logic serves as a theoretical foundation and guideline for classifying the dominant value creation configurations of value net and value shop. An executive education provider primarily provides network platforms on which the actors involved co-create value. In addition, they offer individual solutions to problems in the form of a value shop (Pastowski, 2004). With regard to the dominant value configuration at universities, Pastowski (2004, p. 159) indicates the difficulties of precise identification. In his opinion, the clear assignment of universities to either the business model value shop or value network is not possible. Indeed, he recognises both in the representation of value added, but generally leans more to the business model of value shop as the basis of value creation in the pursuit of research and teaching. Pastowski (2004) describes the university as a problem solver by educating "students according to specific needs" (p. 159). Consequently, the value shop also predominates in the field of research, as initially a problem must be defined in order to ultimately be solved.

To sum up, it must be said that the primary theoretical frame of reference for the EESM developed in this article, adapted to the context of higher education, is formed by the value creation configurations of value net and value shop, taking into account existing findings concerning SD-logic and the value co-creation paradigm.

Following these findings, a theory-based evaluation matrix was created in a first step (Figure 1). It was used during the focus group and expert interviews (see section “Method”). This raw version consisted of the primary activities of the predominant value configuration in executive education, the value net: *Promotion, Set of Services* and *Infrastructure* formed three core levels. Furthermore, the map integrated the four superordinate strategic goals of higher education in the upper part (value level) and included live and digital platforms in the lower part. This first strategy map version provided an appropriate structure and orientation template for the identified student and university president perspectives during the focus groups and expert interviews.

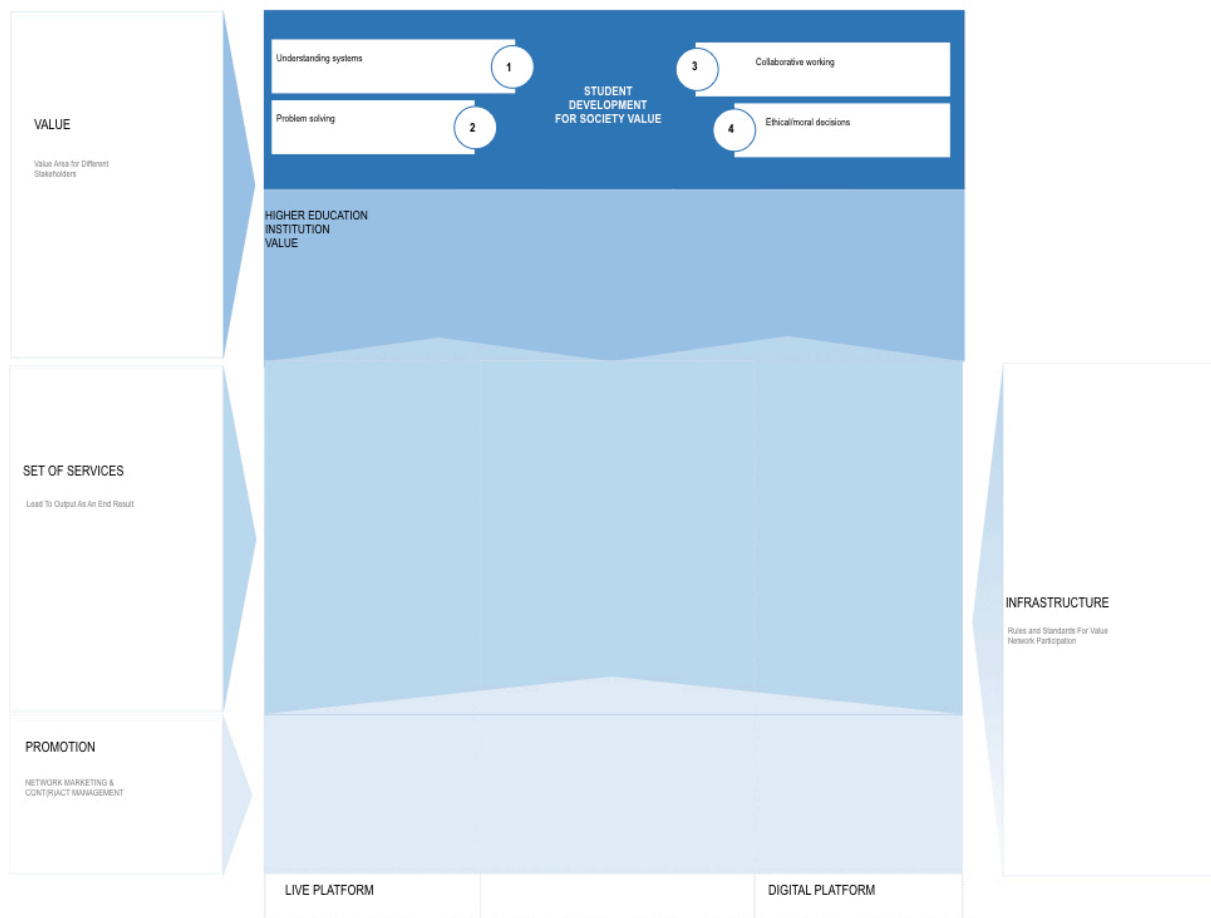


Figure 1: First version of the theory-based evaluation matrix (Wawrzinek, 2018)

6.2 The Means-End-theory approach as a basis for the filling logic

After developing an evaluation matrix, the question of a suitable logic for filling the strategy map with content and systematising the research results arose. The Means-End-theory (Gutman, 1982; Liebel, 2007; Orsingher, Marzocchi, & Valentini, 2011) offers an applicable logic to define, understand and assign the value creation goals of the network actors on the different levels. The subsequent definition provides an overview of the Means-End-theory's assumptions:

Means-End-theories assume that people have certain values and objectives in their lives that also affect their consumer behaviour by establishing a connection between the characteristics of a product or a brand, the consequences for them of its use and its values. The product or the consumer action becomes the means to get closer to a certain goal (ends). (Liebel, 2007, p. 455)

Means-End-theories permit a deeper understanding of the connections between product-immanent meanings and person-immanent values (Liebel, 2007, p. 455). Orsingher, Marzocchi, and Valentini (2011) offer another definition: "The basic assumption is that goals predominate in choice patterns, and that customers select products and services to achieve desired goals" (p. 732). Means-End-theory is popular in marketing research (Liebel, 2007) as well as in satisfaction research, such as "to identify the reasons for customer satisfaction with service experience" (Orsingher, Marzocchi, & Valentini, 2011, p. 733). These findings proved useful in developing a filling logic, as one of this study's main purposes is to identify the value creation goals that lead to executive education student satisfaction.

7. Method

This contribution is based on a qualitative-empirical, inductive research strategy. In accordance with the presented theories and the existing literature on (higher education) strategy maps, an executive education strategy map evaluation matrix with modified levels was constructed in a first step. Qualitative focus group interviews at different times with MBA students and expert interviews with university presidents were chosen as methods to gain further insights into the actors' respective value creation goals in the context of executive education and thus to solve the "intellectual puzzle" (Mason, 2018, p. 10). Focus group interviews have particular benefits, as described by Mason (2018): "Focus groups are especially useful for researchers who want to understand group dynamics, constructions and communications, because they provide access to a group interaction in real time" (p. 113). McLafferty (2004) highlights the number of researchers who

“recommend the use of focus groups for the development of a new inventory” (p. 189), as intended in this research by developing the strategy map. The focus group interview method was especially useful in this study for collecting data in terms of understanding student perceptions and identifying the goals they want to achieve, as well as the services that lead to these goals. Regarding the expert interviews conducted with university presidents, Bogner, Littig, and Menz (2009) state: “it is also evident that expert interviews offer researchers an effective means of quickly obtaining results” (p. 2). Indeed, meaningful data were collected through interviewing these high-level university decision-makers given their insights regarding strategic understanding and objectives. The research design is described below.

The sample consisted of 21 students (divided into three focus groups; n=21) of a part-time Master of Business Administration at a German university (actor students) and three German university presidents (actor HE decision-maker; n=3). The MBA student focus groups were homogeneous in terms of individuals' stage of education, given that all of the students had obtained a Bachelor's degree. However, all groups were heterogeneous in terms of gender, age and professional background. The survey location for the student interviews was always a classroom at a German university. The presidential interviews were conducted in the respective offices of the interviewees at various German universities. The focus group interviews with students lasted between one and a half to two hours, whereas the interviews with the university presidents required between 45 minutes and one hour. All interviews were recorded and then transcribed. The research variables' control quality was quasi-experimental and the researcher's transparency can be described as quasi-biopic. A possible confounding variable was the presence of the researcher, who also worked as an employee within the MBA programme organisation, hence the students knew the interviewer personally. However, students were explicitly informed that in this situation the interviewer was acting as a researcher in order to create a trusting environment. Another confounding variable was the choice of a qualitative research method, which may be criticised as too subjective and evocative (Bryman, Bell, & Harley, 2015). By operationalising the measuring instrument, an attempt was made to counteract this accusation. The measuring instrument was operationalised using the ten “Foundational Premises” in the Higher Education Value Framework (Wawrzinek, Ellert, & Germelmann, 2017b). For each individual premise, a question was formulated and submitted for discussion in the respective group. This made it possible to develop a survey logic for data generation. The questions for the presidential interviews were adapted and reformulated accordingly. During the focus group interviews, the findings and results were

also arranged, clustered and linked together with the interviewees using collage and mapping techniques in the evaluation matrix. In order to systematically collect, evaluate and categorise the data obtained in the focus group and expert interviews, the Grounded Theory method (Glaser & Strauss, 1999) offered suitable points of reference as a methodological approach (cf. e.g. Schmidt, Dunger, & Schulz, 2015). Grounded Theory has a “hermeneutic nature” (Rennie, 2005, p. 87) and helps to code the data obtained in a systematic analysis process. Consequently, the data are compared and assigned to superordinate categories and their meanings. Data collection concludes once theoretical saturation is reached, i.e. no new findings are to be expected.

Following this logic, the data material was prepared, analysed, interpreted and categorised in the form of recorded interviews, field notes and the strategy maps developed during each expert round. These results were subsequently integrated into the consecutive focus groups as well as expert interviews and refined in terms of context in order to generate and categorise new data with theoretical relevance. All results were then compared in order to identify and condense similarities, differences and cause-and-effect relationships. In the final coding phase, essential core categories for the research subject were developed in the form of the respective actors’ superordinate value-added objectives and integrated into the evaluation matrix with regard to the Means-End-approach (Gutman, 1982). The final result is presented and described below.

8. Findings: Levels and platforms of the Executive Education Strategy Map (EESM)

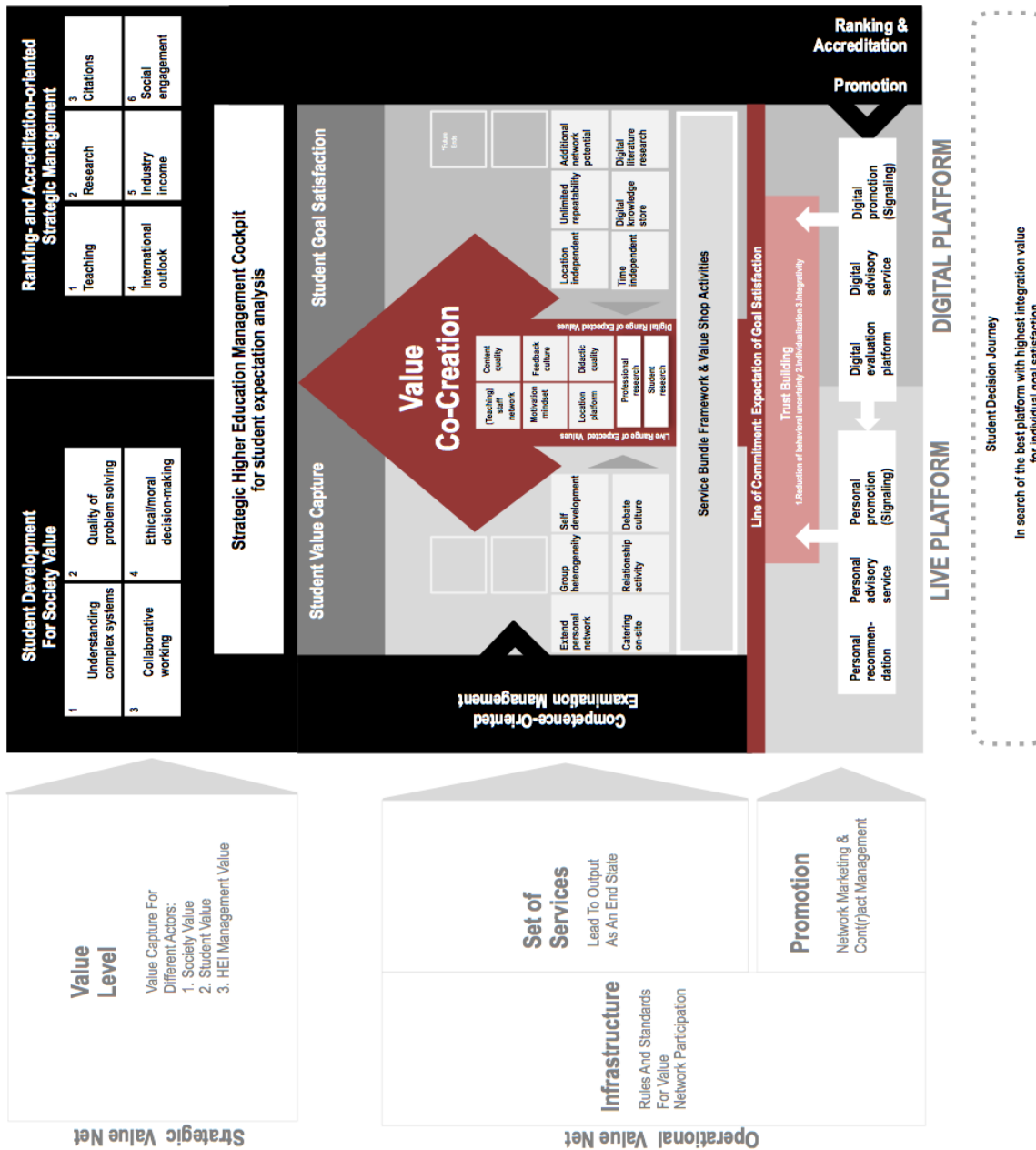


Figure 2: The Executive Education Strategy Map (Wawrzinek, 2018)

First, the theory-based evaluation matrix will be described: the three basic levels in the lower part of the Executive Education Strategy Map *Set of Services*, *Infrastructure* and *Promotion* form the value configuration value net (Pastowski, 2004; Popp, Horbel, & Woratschek, 2017). As mentioned above, in our opinion the value network is the dominant value configuration in executive education, taking into account the Service-Dominant Logic (see Vargo, 2018) and the co-creation paradigm.

This “reinterpretation” (Popp, Horbel, & Woratschek, 2017) facilitates a new understanding of values by considering the integration and usefulness of value propositions, as well as of students as co-creators of value. The value network represents “the formation of a value proposition in the form of a platform on which the participants of the network co-create value by integrating the resources of the service provider or other network participants” (Popp, Horbel, & Woratschek, 2017, p. 514). This platform is split in half in the middle of the map: the area of the *live platform* on the left and the area of the *digital platform* on the right. This division and the choice of platforms as a foundation enables a better structuring and classification of elementary clusters for student goals and value co-creation, as well as visualisation of the *Student Decision Journey*.

Considering the above described criticism in terms of using the classical Balanced Scorecard in service organisations (Woratschek, Roth, & Schafmeister, 2005), the division of the strategy map evaluation matrix into the levels “financial, customer, process and potential perspectives” (see Kaplan & Norton, 2004, p. 7) did not seem to be suitable for the context of executive education. This well-known segmentation was deliberately not chosen, as universities are generally not purely revenue-oriented organisations (even though they increasingly offer paid executive education programmes and consider them a lucrative business field). As Pastowski (2004, p. 159) indicate with reference to the German higher education market, universities create values on different levels and in different combinations. Rarely do they realise revenues for these services. Nonetheless, the growing number of private universities across many countries represents a notable trend (Shah & Nair, 2016). With regard to these developments, it is worth considering the integration of a revenue structure, in the words of Kaplan and Norton (2004) a “financial perspective” (p. 8) that is linked to the existing value-added structure in a follow-up study. However, the representation chosen in this study should correspond to the theory underlying this map and depict the dominant value configurations (value network and value shop). In addition, the statement by Han and Zhong (2015) can be repeated in this context to underline our intention: “[A] strategy map is not a rigid planning mechanism; it can be revised and adapted in response to society” (p. 940).

The author is cognisant that a strategy map cannot depict all interdependencies in their entire complexity. However, this visualisation of societal, student and institutional value creation perspectives facilitates a better understanding of the executive education system, the strategic goals of higher education, its implementation and optimisation, and the basis for developing a performance measurement system to guide executive education offerings in the next step.

8.1 Starting the “Student Decision Journey”

In the lower part, the EESM visualises the *Student Decision Journey*, beginning with information about an MBA programme on digital and live platforms. As a rule, students first seek information online, paying particular attention to reputation factors in relevant rankings. Moreover, the quick and targeted discovery of the desired course of study on the Internet and a digital advisory service that provides first-hand, comprehensive information and answers questions act as important factors to build trust in the offer and reduce behavioural uncertainties. Furthermore, social media offers suitable communication channels for promotion and communication at a very personal level.

However, the live platform provides even more comprehensive personal interaction. This includes promotion in the form of on-site visits, as well as a personal advisory service that ensures individual care. In addition, prospective students can gather recommendations by word-of-mouth. Through offering credibly executed promotional services, behavioural uncertainty is reduced and a decision in favour of the provider is facilitated.

HEI also have the means of communicating unique selling points to consumers by “signalling” (Pastowski, 2004). Pastowski (2004) describes the information on rejection rates as a potential unique signal and repeatedly emphasises the impossibility of demanders measuring the quality of university performance. Most university rankings include the opinions of current or former students (demanders) through extensive surveys. However, according to the author, evaluations of university performance are “mostly individual perspectives that focus on a certain part of the entire business activities” (Pastowski, 2004, p. 374). Nonetheless, prospective students in the executive education field pay particular attention to relevant rankings that serve signalling purposes. Another crucial aspect for students is the element of trust, which plays a decisive role in reducing behavioural uncertainty. Trust is built by the perceptions and considerations of individual needs concerning the study goals as well as the possibility of integrativity, understood as “the phenomenon of customer participation” (Freiling & Paul, 1997, p. 1). If a certain level of trust is attained and the student is convinced that the offer is sufficient for him or her to register, the red marked *line of commitment* will be crossed. This line marks the boundary to enter the so-called expectation corridor, where through the orchestration of different live and digital services (or “attributes”, in the words of Means-End-theory) within the available infrastructure, value is continuously co-created. From the beginning to the end of the expectation corridor, the student captures the values he or she particularly appreciates for his or her personal goal satisfaction. According to Orsingher, Marzocchi,

and Valentini (2011), “goals are the internal representation of desired states that a customer seeks to attain, as well as the reference standards by which he or she evaluates service performance” (p. 731). This insight referring to the already described Means-End-theory is useful here in reproducing the meaning of the strategy map’s filling structure and logic. Moreover, as the authors stress: “The extent to which customers achieve their goals depends in parts on the attributes of the service experience, which can be thought of as the means by which they achieve their desired goals” (Orsingher, Marzocchi, & Valentini, 2011, p. 731). The depicted student goals on all levels include and summarise the services identified during the focus group interviews. The HE services can be seen as the means to achieve the desired goals.

8.2 The most important goals for students on live platforms

The most important goals identified in the focus group interviews for MBA students can be seen to the left of the expectation corridor. These are the extension of the personal network, a group constellation as heterogeneous as possible, opportunities for personal development and optimisation of soft skills, catering and exchange on site, intra- and extra-curricular activities for establishing relationships, as well as a distinct and lived discussion culture inside and outside the classroom.

Furthermore, possibilities and offers to develop one’s student network on-site are extremely important value propositions for MBA students’ goal satisfaction. These can be experienced (for example in the context of catering services) during breaks, as well as in other intra- and extra-curricular activities in order to establish relationships such as excursions, sports activities and other recreational formats. Moreover, a proper graduation ceremony as an appreciation of the achievements and an alumni service that offers additional networking platforms and possibilities after graduation are crucial value creation factors for expanding the personal network.

In addition, catering services organised by the education provider are of particular value to students. Inspired by the “commitment strategy” (Pastowski, 2004, p. 106ff.), it is worthwhile for HEI to invest in students’ physical well-being and provide them with food and drink during their campus-based phases.

The importance of group heterogeneity is noteworthy as well. According to their statements during focus group interviews, students benefit from network participants’ (preferably) diverse job-specific and cultural backgrounds and perspectives. Under these conditions, a remarkable improvement in problem-solving and collaborative

working skills can be seen. Closely linked to group heterogeneity is group size. The surveyed students perceived smaller groups as particularly beneficial in terms of learning efficiency and atmosphere.

8.3 The most important goals for students on digital platforms

The most important student goals identified on digital platforms pertain to the retrievability and repeatability of relevant teaching materials. Specifically created e-learning environments that act as a *digital knowledge store* ensure that teaching materials and contents are available at any time and place. Furthermore, they are repeatable as often as required and adaptable to the working and living habits of professionals.

Digital teaching and learning services are, in terms of blended learning (see Issing, 2009; Porter et al., 2014), valuable add-ons for information, communication and teaching, although they cannot replace the higher education live experience on-site. Digital services are appropriate to gaining additional, valuable “face-to-face” time for discussions or teamwork. Moreover, the online library databases’ literature research is facilitative. These add-on services are particularly important for the (mostly) working students within executive education and help with focusing on the live services. Digitisation provides access to a seemingly endless knowledge store. In this regard, education providers face the challenge of training students to differentiate relevant from unimportant information and to give meaning to it. Moreover, digital platforms offer additional network potential such as in the form of social media chat groups.

Rapidly advancing digitisation will generate numerous other goals and service demands in the future. These goals cannot yet be defined or predicted. For these digital future goals, transparent boxes were inserted as placeholders on both the live platform and the digital platform half.

8.4 The most important goals on both the live and digital platforms

The goals that were deemed particularly important according to executive education students on both live and digital platforms are placed in the middle of the strategy map within the expectation corridor. These include a well-functioning *staff network* consisting of internal administrative service providers who assist with questions and problems, such as IT support and career advice services or programme management. Especially for working students, such internal service providers are of great value, as they only occasionally

make use of the local university infrastructure during phases of attendance, due in part to living far away and having special information and communication requirements.

Moreover, building relationships and networks with teaching staff must be emphasised. Given that executive education content is usually very practice-oriented, the teaching network consists of a large number of practitioners from the private sector, in addition to internal teaching staff like professors and scientific assistants. Students define intensive exchange and networking with these actors as a particularly important goal. By extending the network, they hope for better career chances, development, cooperation and problem-solving opportunities. Conversely, the HEI benefit from capable students who are willing to network, act as ambassadors after completing their studies and support, advise or recommend new students via alumni platforms.

In addition, there are high expectations regarding *content quality*. This includes all course-relevant materials that are made available on live as well as digital platforms. It is therefore crucial that course content and corresponding materials are aligned with the latest (didactic) research results. Furthermore, the content needs to be job-relevant, prepared in a “tailor-made” way and applicable to everyday professional life. Here, visualisations support the reduction of complexity and holistic system understanding (see Ellert, Germelmann, Schafmeister, & Wawrzinek, 2014). Those responsible for the curriculum design – teachers and administrative staff – need to pay special attention to in-class preparation, design and wrap-up.

Another important goal is the *motivation mindset* of all network participants. Mindset can be defined as “attitudes and beliefs” (Mourshed, Krawitz, & Dorn, 2017). Studies from the US school sector show that a “well-calibrated motivation mindset” (Mourshed, Krawitz, & Dorn, 2017) significantly improves school performance. This insight is also transferrable to executive education. As a rule, there is already a very high level of basic motivation among students. They are opting for extra-occupational studies for a variety of reasons, but always consciously and intrinsically motivated. This has a positive effect on group dynamics, greater learning and on the study programme’s recommendation rate.

Therefore, HEI need to ensure that the services offered do not impair student motivation. The provider needs to ensure that a high-motivation mindset also exists among lecturers, administrative staff and the other actors involved in co-creation. Hence, it is useful to collect integrative measures to evaluate and consequently increase or maintain employee satisfaction.

It is likewise very important to establish and maintain a *feedback culture*. Students want to be actively involved in the organisation of the courses as well as in extra-curricular

activities. Given that students in executive education have already completed their undergraduate studies and possess work experience, they are better-able to evaluate the teaching and learning services offered than (for example) undergraduate students. HEI should therefore offer executive education students opportunities for empirical evaluations and regularly demand feedback for quality measurement purposes and thus service quality optimisation. However, surveys on individual courses are far from sufficient. Pastowski (2004, p. 317) points out that these surveys do not take into account fundamental aspects and instead presents a comprehensive approach to measuring the quality of teaching at a German university (p. 286).

In the course of the feedback culture, it is also particularly important for students to receive direct feedback from lecturers, administrative staff and one another in the case of study-specific questions. Furthermore, they appreciate a personal and informal relationship with HEI staff.

Another goal was entitled *location platform*. This includes all live and digital services concerning the location and study environment. In terms of on-site classroom teaching, students demand good transport connections and accessibility. In this case, one notable finding concerns the size of the venue. Big cities are perceived as detrimental to executive education students. Long distances within the city or different accommodation locations can hinder meetings and consequently networking. In smaller, more remote locations, there are better and more intensive networking opportunities. Short journeys and less distraction altogether facilitate a greater focus on study. Nevertheless, the study location must provide an appropriate teaching and learning infrastructure with an academic aura. University facilities (or campus universities to be more precise) are appropriate for this purpose and are clearly preferable to conference rooms in hotels or rented premises beyond the campus. Staying in classrooms on the campus provides a certain sense of belonging and identification, boosts the motivation mindset and fulfils expectations of a suitable place of study.

In terms of classrooms, seminar rooms with movable tables and chairs are preferred in contrast to classical lecture halls with fixed tiers. Lighting, functioning technology, room temperature, didactic teaching tools such as boards, flipcharts, a projector and enough sockets for devices' power supply are also important regarding facilities and an optimal learning atmosphere on-site. An all-around check-up before each lesson is a perhaps trivial-sounding but extremely important service for executive education students.

In addition, a separate room for meeting and resting during breaks, the above-described catering, sports opportunities and available libraries or IT facilities are relevant services for

students, as well as nearby and clean sanitary facilities. Further important factors are digital information services such as schedules, timetables and curricula provided in advance.

Concerning *didactic quality*, executive education students are very demanding regarding teaching content. Special appreciation is given to new didactic concepts and means that allow immediate practice transfer. Simulations, case studies, group work, presentations and discussions – in short, opportunities for live interaction – are clearly preferred to ex-cathedra teaching. Certain types of ex-cathedra teaching like lectures can be “outsourced” digitally in favour of more interactive or competence-oriented teaching methods, for example in the sense of the “flipped classroom concept” (see Scafuto et al., 2017).

The same applies to the examination system. Written tests, which are referred to as forms of “summative” and “formative” examinations (Gaus, 2018, p. 3) mostly test factual knowledge and harbour the danger of “bulimia learning”. They promote “inert knowledge” (Renkl, 2006, p. 1), a “strategic learning behavior” (Gaus, 2018, p. 4) and thus students quickly forget learning content. More appropriate are cross-curricular, written project theses, or, as will be described in greater detail later on, competence-oriented forms of examinations that additionally require competence-oriented teaching.

Competence orientation is particularly suitable for teaching and examining contents embedded in the context of actions (see Fleischmann, 2018). Competence-oriented testing meets the expectations of executive education students, who place considerable value on practical applicability and the contextual integration of acquired learning content.

The student goal boxes *professional research* and *student research* subsume all services pertaining to the generation, presentation and application of new knowledge through research. Executive education students attach substantial importance to teaching staff who actively conduct and know current research in the field of the teaching content. The transmission of first-hand expertise signals competence and has a positive effect on reputation and a motivation mindset. In addition, students appreciate their own research activity by participating in projects or completing the final thesis as well as associated professional advice and support in the form of supervisors and (digital) infrastructure.

Some of the described services that underlie the goals are partially consistent with findings from student satisfaction research. These findings highlight various dimensions that drive or analyse student satisfaction in relation to student loyalty (see for example LeBlanc & Nguyen, 1999; Shahsavari & Sudzina, 2017; Tan & Kek, 2004; Yusoff, Mcleay, & Woodruffe-Burton, 2015). Furthermore, insights from customer satisfaction research (see for example Popp & Woratschek, 2017) are helpful in understanding, comparing and

evaluating the services that are important to students as well as the roles of both attributes and goals for satisfaction formation (Orsingher, Marzocchi, & Valentini, 2011).

However, besides presenting an evaluation matrix for executive education led by theory in the form of a strategy map, the focus of this research is not solely on student (goal) satisfaction, but rather on identifying possibilities for the compatibility of the below described dimensions for society value and executive education student goals.

While offering certain services may result in students satisfying their specific and personal goals, this does not axiomatically mean that social value is generated (see student development for society value). Rather, social value comes from awareness of and improvement in the superordinate strategic goals of higher education (Wawrzinek, Ellert, & Germelmann, 2017a). This can be achieved only through the control of a competence-oriented examination system.

8.5 The Strategic Value Net: The areas “Student Development for Society Value” and Ranking- and Accreditation-oriented Strategic Management

The upper part of the EESM represents the *Strategic Value Net*, within which the actors society, students and HEI capture value. At the top left are the overarching strategic goals of higher education in the form of four basic competences presented in a conceptual essay (see Wawrzinek, Ellert, & Germelmann, 2017a). The consideration and promotion of these four strategic goals or basic competences leads to increased social value. Students who are appropriately trained in problem-solving, collaborative work, complex system understanding and ethical-moral decision-making in their studies (regardless of the field of study) make a positive contribution to the social development of a country. This insight was also confirmed by the university presidents interviewed. However, a normative claim concerning its implementation was also viewed critically with reference to the freedom of research and teaching (Article 5 Paragraph 3 of the German constitution). In the following it will be explained that these competences are also essential, but implicitly formulated goals for executive education students. Although some students mentioned certain services that are important to them and that result in the teaching of basic competences, they were not able to explicitly name concrete basic competences as a goal of their own accord. The teaching of basic competences as a goal was implicitly expressed. The following student statement concerning the basic competence collaborative working exemplifies this fact: “I like to learn in teams and I have the feeling that I actually (*accentuating*) only learn through the exchange in a team” (17:29, focus group 1, student

4). In the specific presentation and naming of the four basic competences, their importance was immediately agreed upon. This makes it all the more necessary for executive education providers to activate and disclose superordinate strategic goals right at the beginning of their studies so that they become conscious and relevant to students.

The *ranking and accreditation-oriented strategic management* section is located at the top-right of the map. Evaluating the expert interviews with university presidents revealed that they attach great significance to top placement in international rankings, which play a very crucial role in strategic management tasks. Most of the indicators used to manage HEI were solely based on the performance indicators presented (which in turn are based on the performance indicators of the best-known international and most respected university rankings worldwide, such as the Times Higher Education World University Ranking). Prestigious ranking placements are at the top of the management target priority list if they do not yet exist or have not yet been achieved. If good or excellent rankings already exist, these have to be improved or at least not worsened. In any case, good ranking results need to be presented to the public (e.g. by appropriate signalling). This focus on rankings can be explained by the increased competitive pressure that exists in the higher education sector described above. Rankings are intended to enhance HEIs' reputation in research and teaching in order to increase their chances of attracting sought-after third-party funding, highly qualified personnel and ultimately students. The same applies to internationally renowned and recognised accreditation institutions. For this reason, rankings and accreditation have a decisive influence on the promotion level (see bottom right).

8.6 Competence-oriented examination management as a way of achieving the strategic goals of higher education

The fact that the strategic goals of higher education presented are desirable, meaningful and of social value was explicitly confirmed by all of the university presidents interviewed. As already explained, however, implementing normative requirements in university teaching was also viewed critically. For example, one president remarked: "As a professor I would be confused if my president approached me and asked me if I have considered teaching problem solving, then complexity thinking, then collaborative working" (21:23, expert interview 1). Moreover, concerns with regard to ethical/moral decision-making were expressed in one case and it was indicated that the teaching of moral competences was

not primarily a university's job, but rather had to take place much earlier in childhood in the parental home.

Altogether, however, the four superordinate strategic goals of higher education identified received broad approval from both the students and presidents. A gentle way of activating these goals or basic competences while taking into account and recognising the freedom of research and teaching is to embed them in competence-oriented forms of examination. These are particularly suitable for executive education degree programmes, are oriented towards clearly defined, verifiable learning objectives (Gaus, 2018), and also take into account the changing roles of teachers and learners. The focus here is on student learning guidance. While teachers help with complex tasks, students are encouraged to organise themselves as independently as possible. Examination tasks can take place at several levels (Schröder, 2015, p.4). These are referred to as:

1. "Remembering and understanding" (e.g. through interdisciplinary knowledge tests/ progress tests);
2. "Applying" (e.g. simulation games);
3. "Analysing and Evaluating" (e.g. internships that are linked to thematic lectures);
4. "Expanding and creating" (e.g. fictional simulations).

The superordinate strategic goals of higher education, which simultaneously represent four basic competences, are thus highly compatible with the methods of competence-oriented forms of examination. These provide a suitable framework for influencing the content of executive education study programmes in terms of their social value. For example, business games or simulations are applicable for testing problem-solving competencies and complex system understanding. If such forms of examination are introduced, the teaching methods must automatically be adapted accordingly.

8.7 Strategic Higher Education Management Cockpit

Finally, based on the Means-End-theory approach and the presented findings of satisfaction research (Orsingher, Marzocchi, & Valentini, 2011), the *Strategic Higher Education Management Cockpit* serves as an integrative tool to find out the following: first, the goals that executive education students have at the beginning of their studies; second, how these change over time; and third, to what extent goal satisfaction is achieved. This is achieved by means of suitable measurement methods, the precise elaboration of which requires a further research step. In addition, the cockpit can be used to examine the similarities and discrepancies that exist between student goals and the overarching

strategic goals of higher education, as well as ranking- and accreditation-oriented strategic management indicators. Finding out which similarities dominate the discrepancies is of particular interest. This will enable HEI to optimise, change or redesign corresponding services. The overriding aim is to determine the extent to which HEI have achieved their strategic goals, which in turn can be activated via competence-oriented examinations.

9. Conclusion, limitations and implications

The research has shown that the strategy map's theory-based evaluation matrix offers a system and means of visualisation to structure, classify and understand the value creation logic and value drivers of various actors on the service platform of executive education. It integrates the perspectives of the network actors' society of German MBA students and university presidents collected in qualitative interviews, taking into account the co-creation paradigm. The EESM also tries to identify cause-and-effect relationships between their different strategic goals and focuses.

The strategy map is a strategic management tool for university decision-makers such as presidents, but also for university marketing. It provides a basis for developing suitable measuring instruments to analyse similarities and discrepancies between the actors' objectives in the form of a high-quality key figure system. Thus, it allows HE executives to flexibly adapt, change or improve services in teaching administration or marketing.

The presentation of the Student Decision Journey initially provides valuable insights for executive education providers in the design of promotion activities and makes clear which services are particularly important for prospective students in building trust. Confidence in the services offered for the satisfaction of goals is of essential importance in order to reduce uncertainties and ultimately to commit oneself to an offer. During their studies, students capture the values that are most important to them in order to satisfy their individual goals. The student goals identified through focus group interviews and the subsumed decisive services for their satisfaction grant an orientation compass for executive education providers with regard to the operative design of an MBA study programme. The Strategic Value Net in turn combines HE's superordinate strategic goals for social value and the strategic management goals that are important for university presidents. This area is not only crucial for the holistic presentation of the executive education system, but also for measuring the similarities and discrepancies between the actors' goals. At this point it is important to note that the qualitative data collected and integrated into the evaluation matrix is limited to the German executive education market

in the context of a purely German MBA study programme at a German university. Future research should ascertain similarities and differences in student and president goals as well as the value drivers in an international comparison. The results of quantitative surveys (see for example TopMBA, 2018) show country-specific differences and trends in the motivation for taking up an MBA degree (TopMBA, 2018). For example, a higher salary for candidates from the USA, Canada and Western Europe is of particular importance in a global comparison, while candidates from Latin America consider “new skills” the top motivating factor.

The evaluation matrix can also be used for executive education programmes in other countries, regardless of the main areas of study. However, it should be noted that the differences in the (financing) nature of higher education institutions (e.g. private vs. state universities) may require the integration of an additional financial perspective. Managers of private educational institutions are confronted with different challenges and requirements from those of state higher education institutions. Moreover, here too there are numerous country-specific peculiarities and differences between higher education systems, in spite of the increasing harmonisation of international standards.

In addition, reference should be made to the superordinate strategic goals and basic competences of higher education, which can be controlled via competence-oriented examinations. Future research must consider the extent to which and for whom there are possibilities to define and enforce examination types at universities. If the choice of examination types complies with the postulate of freedom of research and teaching, it will be difficult to establish a compulsory examination system for all.

However, this paper supports the necessity of teaching the four basic competences “understanding complex systems”, “problem solving”, “collaborative working” and “ethical/moral decision-making” as social value drivers, and thus argues in favour of a competence-oriented examination system in executive education.

A further important research step is the concrete elaboration of a high-quality key figure system in the form of a modified Balanced Scorecard based on the strategy map presented. Given that it integrates the dominant value configurations of value network and value shop, it provides a suitable footing for identifying and deriving fundamental cause-and-effect relationships in the system of executive education understood as a service. Once the cause-and-effect relationships have been identified, the next step is to derive applicable indicators for their control. Future research is also required to further develop the Strategic Higher Education Management Cockpit with suitable measurement methods

in order to empirically ascertain the similarities and discrepancies between the different actor goals and to render the results applicable in practice.

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APPENDIX: Research questions and selected original quotes

Research Question	How does student commitment come about in executive education?
	<p>TOP-6 for trust building by digital and live promotion-and signaling-activities:</p> <ol style="list-style-type: none"> 1. Word of Mouth: Personal recommendation by colleagues, friends, acquaintances or well-known personalities in the industry (e.g. testimonials) 2. WHAT is offered and WHO teaches or is part of the value network? Content preparation and presentation of high-ranking personalities (rank, status and experience) in teaching 3. Positioning and retrievability of the study programme and the HEI in relevant rankings as a quality feature 4. Personal contact and information for questions through advisory service (telephone and on-site), but no "aggressive" sales: respectful handling, flexibility and transparency. 5. Retrievability presentation and reputation on the Internet and in social media: quality instead of quantity in the design of the website, the information material or the social media presence. 6. Existing network and range of activities (e.g. alumni club)
Student Goals in Strategy Map	Digital promotion (signaling), digital advisory service, digital evaluation platform, personal promotion (signaling), personal advisory service, personal recommendation

Tab. 1: TOP-6 for trust building by digital and live promotion-and signaling-activities

Research Question	How does student commitment come about in executive education? Selected original quotes in German (S=student; FG=focus group)
	<p>zu 1: 36:35 S3 FG1: Bei mir war es eher der Erfahrungsbericht von noch eingeschriebenen oder ehemaligen Studierenden...bei uns arbeitet einer, der den MBA gemacht hat...</p> <p>37:21 S2 FG1: Bei mir war es so ähnlich, allerdings hat es mir ein ehemaliger Dozent empfohlen, mit dem ich zusammenarbeite...er hat mir alles erklärt, wie ist es aufgebaut, welche Art von Studenten gehen da hin, also auch wieder die Reputation wie du vorhin schon gesagt hast.</p> <p>52:42 S4 FG3: Hab zu der Zeit ... noch den BA gemacht, wollte mich aber auch danach weiterentwickeln, dann habe ich mich umgehört und einen Tipp von einem beruflichen Kontakt bekommen,</p> <p>zu 2: 38:39 S3 FG2: Dann geht das fast nur über die Inhalte...Die Inhalte müssen bekannt sein, dann kann man abwägen und fragen ist das was für mich? Und brauche ich genau das, was angeboten wird?</p> <p>40:37 S4 FG1: Auch noch zusätzlich zu den Inhalten vielleicht auch noch ist die Frage wer steht denn dafür? Wenn man mit praxisnaher Ausbildung wirbt, sehe ich mir ganz genau an wer das unterrichtet...wenn nur Theoretiker unterrichten ist die Motivation niedrig...Ich will eigentlich jemanden da vorne haben der sagt ich habe 30, 40 Jahre in dem Bereich gearbeitet.</p> <p>zu 3: 44:22 S4 FG 2: Das Ranking war wichtig!</p> <p>45:07 S1 FG 2: Für mich war auch irgendwie so Ruf und Image der Uni</p> <p>zu 4: 52:35 S2 FG 3: Also ... CRM, ganz wichtig!</p> <p>49:54 S5 FG 1: Also bei mir war ein ausschlaggebender Punkt: wenn man recherchiert, findet man die Inhalte die nötig sind....., aber im Gesamteindruck hatte ich das Gefühl, dass es zu mir besser passt.</p> <p>zu 5: 48:21 S3 FG 2: Den ersten Eindruck machst du nicht mehr wett, ja genau...</p> <p>48:28 S7 FG 2: ... ich finde ich muss sagen, dass die Website nicht perfekt war, als ich reingeguckt habe, fand ich es sympathisch. Weil ich ich habe eine gewisse Allergie gegen Hochglanzbroschüren, da gehts mehr um die Oberfläche als um den Inhalt.</p> <p>zu 6: 37:46 S5 FG1: Bei mir waren es zwei Sachen: Recherche im Internet ...Da ist die Reputation sehr gut ...daher haben es mir zwei Alumni empfohlen.</p>

Tab. 2: TOP-6 for trust building by digital and live promotion-and signaling-activities:
selected quotes

Research Question	Which services are crucial to achieve the student goal satisfaction?
	<p>TOP-6 services for high motivation mindset and student goal satisfaction:</p> <ol style="list-style-type: none"> 1. Direct and regular exchange with lecturers and fellow students in and outside the classroom and opportunities for regular feedback (evaluations, personal discussions) 2. New didactic concepts: Joint discussions and group work during face-to-face teaching, minimizing frontal teaching. 3. Adapting teaching content, teaching materials and examination forms to the requirements of professionals: Making content and materials accessible on digital platforms (e.g. e-learning platforms) and competence- and practice-oriented examination forms. 4. Joint activities to expand the personal network: catering, extra-curricular network events, sports, graduation ceremony 5. Quick help with regard to administration questions (e.g. IT services, career service, program management) 6. The teaching contents correspond to the latest research results and support individual research through competent supervision.
Student Goals in Strategy Map	<p>Motivation mindset, (teaching) staff network, extend personal network, content quality, feedback culture, didactic quality, location platform, professional research, student research, location independent, time independent, unlimited repeatability, digital knowledge store, additional network potential, group heterogeneity, relationship activity, debate culture, self development</p>

Tab. 3: TOP-6 services for high motivation mindset and student goal satisfaction

Research Question	Which services are crucial to achieve the student goal satisfaction? Selected original quotes in German (S=student; FG=focus group; I=interviewer)
	<p>zu 1: 1:10:53 S4 FG 2: Würde es anders sagen. Was mir positiv auffällt ist die Verbindlichkeit. Ich stelle eine Anfrage an den Dozenten und bekomme umgehend eine Antwort...auch die Verbindlichkeit unter den Studenten...wenn man ne Frage hatte wurde dies untereinander umgehend beantwortet...man hilft und unterstützt sich innerhalb der Gruppe</p> <p>55:47 S1 FG1: Ähnlich ist es bei mir auch, aber weniger über die Alumni-Geschichten. Eher, dass ich fast mit jedem Dozenten beruflich eine Verknüpfung angefangen habe, weil man da einfach das Netzwerk auch benutzen kann.</p> <p>31:25 I in FG1: Also Sie meinen das highly motivated mindset, das Sie auch als Service ihrerseits sehen?</p> <p>31:34 S4 FG1: Würde ich als Service meiner Kommilitonen betrachten, ja.</p> <p>zu 2: 17:29 S4 FG1: ... ich lerne gern in Teams und ich habe das Gefühl, dass ich durch den Austausch im Team eigentlich (<i>betont</i>) lerne. Ich würde mir daher mehr Teamarbeit wünschen,</p> <p>zu 3: 28:42 S1 FG1: Für mich ist es ein großer Service wenn die Dozenten den Stoff so aufbereiten, dass ich eine leichte Lernnachbereitungsphase habe. Um es eben auch abrufen zu können. Das hilft mir gerade nebenberuflich extrem viel weiter. ...</p> <p>zu 4: 56:27 S5 FG1: Kaminabend, Mittagessen und Kaffeepausen bieten Raum zur Begegnung - Aber auch Exkursion nach Magglingen, da findet ja auch eine Interaktion mit den Studierenden und Dozierenden außerhalb des Curriculums statt. Und man kann auch individuelle Themen ansprechen beim Dozenten.</p> <p>34:29 S3 FG3: Aber auch Exkursionen ... dass man auch außerhalb der regulären Unterrichtszeiten die Möglichkeit hatte und sagen konnte da geh ich hin, oder eben nicht, aber dass da auch die Möglichkeit war irgendwelche Unternehmen kennenzulernen.</p> <p>zu 5: 1:45:54 S4 FG2: Ich finde auch die Informationen vorher, was steht an, wo steht's an, ich kriege diesen Ablaufplan, die Informationen, das sind Dinge die zu der guten Organisation dazugehören, die dann einen Mehrwert auch schaffen.</p> <p>1.20.26 S5 FG1: Das geht ja schon los beim Erstellen des Curriculums... da ist ja ein roter Faden der da hinter steht also da Rüstzeug für einen Manager in welcher Form auch immer im Sportbusiness, dieser Gedankengang...Studienplanung ist auch schon Teil der Co-Creation...Operative Abwicklung...Termin und Dozentenfindung...</p> <p>1:28:22 S1 FG3: Wer auch wichtig ist ist die Rundumorganisation...die Infos wo was wann stattgefunden hat...weil sonst...Dozenten und Studierende müssen sich erst einmal finden.</p> <p>zu 6: 1:07:42: S2 FG3: ...Am intensivsten war aber diese Ko-Kreation glaube ich jetzt während der Masterarbeit . Mir bleibt speziell die Co-Creation während der Masterarbeit in Erinnerung....mit dem Professor X...das war sensationell.</p>

Tab. 4: TOP-6 services for high motivation mindset and student goal satisfaction: selected quotes

Research Question	Which services are crucial with regard to location and infrastructure in order to achieve the personal student satisfaction goals?
	<p>TOP-6-services regarding infrastructure and location</p> <ol style="list-style-type: none"> 1. Provision of food and drink in close proximity 2. Good transport connections and accessibility 3. Good price-performance ratio with regard to accommodation 4. Small venues as a benefit: Big cities are perceived as detrimental 5. Campus-university for academic aura with suitable seminar rooms (movable tables, necessary technical equipment and teaching tools), meeting rooms and relaxation areas 6. Simple and uncomplicated use of internal infrastructure services also from outside (e.g. library)
Student Goals in Strategy Map	Catering on-site, location platform, (teaching) staff network, motivation mindset, digital literature research, relationship activity, extend personal network, personal promotion (Signaling), Digital promotion (Signaling), didactic quality, student research

Tab. 5: TOP-6-services regarding infrastructure and location

Research Question	Which services are crucial with regard to location and infrastructure in order to achieve the personal student satisfaction goals? Selected original quotes in German (S=student; FG=focus group; I=interviewer)
	<p>zu 1: 32:00 S5 FG1: ...oder eben auch beim Mittagessen, wo ein Catering bereit gestellt wird und sichergestellt wird, dass die Studierenden nicht in die Stadt gehen müssen in kleinen Gruppen, sondern dass alle gemeinsam nochmal die Möglichkeit haben sich abseits der Lehre des Tages auszutauschen.</p> <p>32:51 S3 FG2: ...warum haben wir hier das Catering, warum setzen wir uns zur Mittagspause zusammen, warum machen wir das überhaupt? Wenn wir das nicht hätten würde es das Netzwerk nicht geben. Zumindest einen entscheidenden Teil.</p> <p>32:46 S2 FG3: Was für mich noch dazu kommt ist das ganze Thema rund um die Verpflegung. Ich fand's persönlich sehr wichtig, dass wir alles zur Verfügung gestellt bekommen haben.</p> <p>zu 2: 1:19:35 S3 FG2: Wir sind ja jetzt tatsächlich alle Autofahrer...habe auch gehört, dass Busverbindungen am Wochenende eher schlecht sind.</p> <p>1:19:13 S2 FG2: Für Leute die fliegen und mit dem Zug fahren ist diese Stadt eine Katastrophe..."</p> <p>zu 3: 1:18:17 S1 FG2: Ich war positiv überrascht als ich zum ersten Mal hier hergekommen bin. Hab mich auf die Hotelempfehlungen berufen... Die kurzen Wege sind super! Alles nah beieinander, das Preis-Leistungs-Verhältnis auch beim Hotel,</p> <p>1:21:04: S1 FG3: ...Was ich absolut toll finde ist auch, dass wir da Sonderkonditionen bekommen als Studierende.</p> <p>zu 4: 1:06:41 FG1: Man kann nicht davonrennen (<i>lacht</i>). Der Großteil kommt nicht aus der Region, man trifft sich also im Hotel oder Abends zum Essen, es gibt immer die Möglichkeit sich auszutauschen... In einer Stadt wie XX wäre das nicht möglich, da würde sich die Gruppe viel schneller auflösen</p> <p>1:22:36: S2 FG3: Was ich noch zu den unterschiedlichen Standorten sagen wollte: Ich will doch als Student zur Uni kommen, ich will nicht, dass die Uni zu mir kommt... Genau deswegen ist man ja auch hier und man kennt sich aus...Es sollte so bleiben.</p> <p>1:23:10 S6 FG2: Ne gar nicht! Das würde ja diesen Charakter...Großstädte würden dieses Angebot unattraktiver machen"</p> <p>zu 5: 1:01:10 S3 FG1: Also die Atmosphäre ist besser und man kann einfacher diskutieren, wenn man sich sieht. Wenn man in U-Form sitzt, dieses parlamentarische ist nicht so geeignet.</p> <p>1:22:11 S4 FG:2: Zurück zur Frage, das ist hier ja auch ein Lernumfeld, man weiß wir sind hier an einer Uni, in einem entsprechenden Umfeld, man weiß also von der Einstellung her, man ist hier um etwas zu lernen...nicht wie in einem Seminarraum im Hotel...</p> <p>zu 6: 1:20:39 S3: Zählt die Bibliothek auch zur Infrastruktur? Bibliothek ist negativ für mich...i Die Bibliothek der Uni ist besser gesichert als mein Bankaccount auf dem Handy...Mit diesem VPN-Client...bis das mal funktioniert, dann diese drei verschiedene Passwörter....sehr nervig".</p> <p>1:16:42 S3 FG3: Was ich auch ganz wichtig fand war der Zugriff auf die Online-Bibliothek, das man auf die ganzen Materialien, Inhalte und Skripte Zugriff hat. Mal wars vielleicht etwas komplizierter und man hat im Endeffekt doch nicht so viel Zugriff gehabt wie man dachte...</p>

Tab. 6: TOP-6-services regarding infrastructure and location: selected quotes

Research Question	Which KPIs help university presidents make better decisions? Selected original quotes in German (P=president; I=interviewer)
	<p>13:40 P1: ...also es ist natürlich Standard, dass wir uns die Auslastung im Bereich Lehre sehr gut anschauen, also, da ist es so, dass wir Kennzahlen haben, die bestimmte Formate beschreiben...dann haben wir sowas wie Drittmittelaufkommen pro Fakultät und universitätsweit, wir haben natürlich die Zahl der internationalen Studierenden, wir haben abgeschlossene Promotionen pro Professor</p> <p>16:32: P1: Ja, es gibt Studierende in der Regelstudienzeit als wichtige Kennzahl, diese Abbruchquoten sind immer ein bisschen schwierig</p> <p>17:40 I: Welche KPIs würden Sie sich wünschen um besser entscheiden zu können? Gibt es da Bereiche wo Sie sich denken: Es wäre sinnvoll da tiefer reinzugehen?</p> <p>17:56 P1 (<i>schnauft, überlegt lange</i>): Ich würde vielleicht gerne etwas , etwas, sozusagen eine Nachverfolgung von Zielen, wäre für uns ein guter Punkt, dass man sozusagen mit einer Kennzahl versieht `Was startet man und wo will man hin`</p> <p>36:09 P1: Doch, das sage ich, doch das steht so nicht in der Universitätsentwicklungsplanung. Und zwar deswegen weil sich dafür kein Konsens hätte finden lassen. Es steht aber drinnen, also wir haben den Bereich Qualitätsmanagement, dass Rankings hier ein Ziel sind auch eine diverse Teilnahme an unterschiedlichen Rankings ein Ziel ist und natürlich sage ich es im Verbalen, ja, dass wir hier nach vorne wollen</p> <p>10:20 P2: Ich würde mal sagen ja, wir wissen um Zahlen und wir freuen uns auch wenns welche gibt, die leicht kommunizierbar sind, aber wir versuchen mehr momentan gestaltend einzugreifend derzeit bei den Dingen, die uns wichtig sind... und dann mit Begeisterung die Leute hinter uns zu bringen.</p> <p>11:40 P2: Mhm, also wir haben diese ganzen Zahlen irgendwo in unserer Verwaltung, in einer 700 Mann-Verwaltung hat man fast alles. Also es gibt Leute die können die Zahlen blind, wenn Sie die um 3 Uhr Nachts wecken...Ich gehöre aber schon zu den Vertretern, die sagen das ist nicht unser Problem dass wir diese Zahlen nicht hätten, oder mit denen arbeiten könnten. Was (<i>überlegt</i>) wichtiger ist, ist so ein Gefühl dafür, wofür steht diese Uni und wo will sie hin.</p> <p>16:12 P2: Wenn wir einen Bereich haben der heißt Materialien und Prozesse und wir sehen im DFG-Ranking wir sind Deutschlandweit Nr. 1 und wir sind auch in Prozess- und Verfahrenstechnik Nr 1., dann ist dieser Forschungsschwerpunkt wahrscheinlich richtig gewählt.</p> <p>27:30 P2: ...gerade die Woche wurde die deutsche Unilandschaft abgewatscht vom Times Higher Education Ranking, die haben festgestellt, dass alle deutschen Exzellenzunis da nicht auftauchen, wir tauchen da auch nicht auf, da taucht irgendwie keiner auf so wirklich...außer die paar, die sich irgendwie doch um Lehre kümmern.</p> <p>18:37 P3: Natürlich brauchen Sie Kennzahlen, Sie müssen ja Erfolge nachweisen, oder eben entsprechend wieder fallenlassen, das heißt natürlich brauchen Sie als Kennzahl z.B. Zahl der Sonderforschungsbereiche, Zahl der Graduiertenkollegs, Zahl der Doktorandenkollegs, Abgänge der Studenten, Qualifikation der wissenschaftlichen Mitarbeiter, welche Mitarbeiter habilitieren oder werden nach der Promotion wegberufen, auf Professorenstellen anderswo, das ist ein Renommee für die Universität, eine ganz ganz wichtige Kennziffer, für die Universität...Drittmittel sind eine ganz ganz wichtige Kennzahl für eine forschungsorientierte Universität... Dann natürlich, äh, Gastprofessoren, wer ist bereit, wer kommt hierher wegen des Rufs der Universität, also wir haben Kennziffern wie `Zahl der Humboldt-Stipendiaten, Zahl der Humboldt-Preisträger beispielsweise, also das sind alles Kennzahlen die wichtig sind, zu belegen, dass ein Profil an der Universität gut läuft.</p> <p>20:48 P3: Es gibt... eine ganze Menge von Exzellenzinitiativen, die dann dies auch unterstützen. Das heißt Sie müssen in der Lage sein das wirklich genehmigt zu bekommen.</p>
President Goals in Strategy Map	Teaching, research, citations, international outlook, industry income, social engagement

Tab. 7: KPIs helping university presidents with decision making: selected quotes