İSTANBUL TİCARET
ÜNİVERSİTESİ

**T.C.**

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**SOCIAL SCIENCES INSTITUTE**

**BUSINESS ADMINISTRATION DEPARTEMENT**

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# Social Media Integration into Higher Education Institutions' E-Strategy: A Holistic Framework

**PhD Dissertation**

**Djihane Ammari**

**200003049**

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**SOSYAL BİLİMLER ENSTİTÜSÜ**

# DOKTORA TEZİ ONAY FORMU

İşletme Doktora programı öğrencisi Djihane Ammari'nin "**Yükseköğrenim Kurumlarının Çevrimiçi Stratejisine Sosyal Medya Entegrasyonu: Bütünsel Bir Çerçeve Önerisi**" başlıklı tez çalışması, Enstitümüz Yönetim Kurulu **--.--.----** tarih ve **2022-518/18** sayılı kararıyla oluşturulan jüri tarafından oybirliği/oyçokluğu ile Doktora Tezi olarak kabul edilmiştir.

UNVANI, ADI SOYADI

TEZ DANIŞMANI: Prof. Dr. Murat Kasımoğlu

JÜRİ ÜYESİ: Prof. Dr. Tuğba Karabulut

JÜRİ ÜYESİ: Doç. Dr. Sabri Öze

JÜRİ ÜYESİ: Prof. Dr. Aslı Ekmekçi

JÜRİ ÜYESİ: Doç. Dr. Pınar Başer

Hazırlamış olduğum tez özgün bir çalışma olup YÖK ve İTİCÜ Lisansüstü Yönetmeliklerine uygun olarak hazırlanmıştır. Ayrıca, bu çalışmayı yaparken bilimsel etik kurallarına tamamıyla uyduğumu; yararlandığım tüm kaynakları gösterdiğimi ve hiçbir kaynaktan yaptığım ayrıntılı alıntı olmadığını beyan ederim. Bu tezin ihtiva ettiği tüm hususlar şahsi görüşüm olup İstanbul Ticaret Üniversitesinin resmi görüşünü yansıtmamaktadır.

Djihane Ammari

# GENİŞLETİLMİŞ ÖZET

## 1. Sorun bildirimi

Sosyal medya platformları aracılığıyla bir üniversiteyi tanıtmak, bu platformlarda marka bilinirliğini artırmak, daha fazla öğrenciye ulaşmak, daha fazla başvuru almak ve öğrenci etkileşimlerini artırmak için harika bir fırsattır. Ayrıca, mevcut kaynaklara uygun olarak uzun vadeli hedefler belirleme süreci olan etkin markalaşma, etkin bir strateji dâhilinde gerçekleştirilmelidir. Hatta küreselleşme ve sanal faktörün artan rolü nedeniyle özellikle üniversiteler çeşitlenme fırsatları ve rekabet riskleri ile karşı karşıya kaldığında, üniversiteler için en umut verici yönetim mekanizmalarından biri haline gelmiştir (Yureva, 2016).

Bu koşullar altında, sosyal medyanın yükseköğretim kurumlarının yönetim stratejisine getirdiği değişimin etkisini ve önemini anlamak ve vurgulamak için kapsamlı araştırmalar yapılmıştır (Bélanger, vd. 2014; Jashim *vd*,. 2015; Rauschnabel ve Hinsch, 2017; Petrova, 2017). Diğer çalışmalar yükseköğretim kurumlarının yönetim stratejilerine ve değişime nasıl uyum sağlanacağına odaklanmıştır (Kettunen, 2011; Stukalina, 2013; Felix, Rauschnabel ve Hinsch 2017). Stratejik yönetimin klasik bakış açısını üniversite yönetimi ile ilişkilendirmeyi amaçlayan çok sayıda çalışma olmasına rağmen yükseköğretim kurumlarının yönetimi stratejik yönetimden bağımsız bir çalışma alanı olarak görülmüştür. (Kettunen, 2011; Stukalina, 2013). Bu sürecin birçok teorik ve metodolojik yönü, perspektiften yoksundur ve yükseköğretim kurumları operasyonel ortamlarındaki değişimine uyacak şekilde güncellenmemiştir (Yureva, 2016).

Öte yandan yükseköğretim bağlamında sosyal medya kullanımı ve uygulamasına yönelik birçok çalışma yapılmaktadır. Bu araştırma alanının yeniliği nedeniyle, sosyal medya'nın yükseköğretim stratejik yönetimine entegrasyonu söz konusu olduğunda hala literatür eksikliği bulunmaktadır. Bu çalışma, (Constantinides ve Stagno, 2012, Galan *vd,*. 2015) sosyal medyayı yükseköğretim kurumlarının stratejik yönetim sürecine dâhil eden bütünsel bir model sunmayı amaçlamaktadır. Bu doğrultuda hem sosyal medya entegrasyon tedbirlerini hem de yükseköğretim kurumları stratejik yönetim sürecini teorik ve pratik çalışmalara ve çıktılara dayalı olarak birleştiren bütünleştirici bir çerçeve geliştirmeye çalışmaktadır. Bu araştırmanın genel amacı, sosyal medya platformlarının stratejik yönetim planlarına sistematik entegrasyonunu benimsemede yükseköğretim kurumlarını destekleyen ve yönlendiren bütünleştirici bir çerçeve geliştirmektir.

## 2. Veri Toplama Yöntemleri

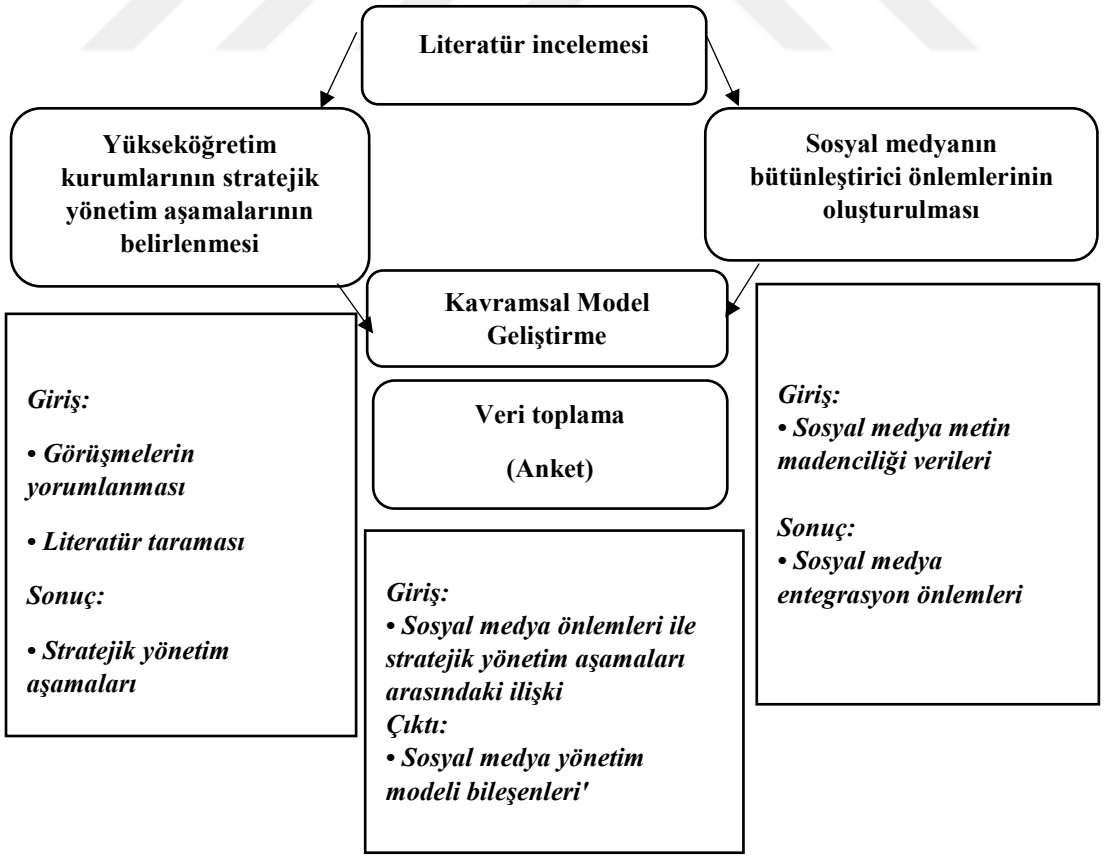
Tablo 1'de, araştırmada kullanılacak üç veri toplama yöntemini ve her bir yöntemin kullanım gerekçesini göstermektedir:

| Metodoloji | Veri toplama aracı | Analiz Stratejileri | Meşrulaştırma |
|---|---|---|---|
| **Nitel** | Görüşmeler | Yorumlama | Yükseköğretimde stratejik yönetim önlemlerini belirlemek |
| **Nicel** | Sosyal medya Metin Madenciliği | Yorumlama Kısmi Korelasyon analizi | Sosyal medya dâhil etme önlemlerini belirlemek. |
| | Anketler | Tanımlayıcı istatistik analizi SEM analizi | Araştırma modeli ve hipotezleri test etmek. |

Tablo 1. Veri Toplama Yöntemleri

**3. Araştırma Metodolojisi**

Bu araştırmanın metodolojisi aşağıda gösterilmektedir:




Şekil 1. Araştırma Adımları ve Bulgularının Ayrıntılı Gösterimi

## 4. Literatür İncelemesi

### 4.1. Yükseköğrenim Bağlamında Sosyal Medya Pazarlaması

Yükseköğretim sektöründe sosyal medya araçları, pazarlama yöneticilerine ve içerik oluşturuculara, içeriklerini ve stratejilerini uygun paydaşlarla uygun iletişim kanallarını kullanarak sonsuz fırsatlar sağlamada önemli bir rol oynamaktadır (Holmes, 2016; Wali ve Andy-Wali, 2018) . Ek olarak, tüm platformlarında yayınlanan içerik, üniversitenin faaliyetleri ve sunulan programlar hakkında hem genel hem de özel bilgileri ücretsiz olarak edinmelerini sağlar (Almadhoun ve diğerleri, 2011; Cox & McLeod, 2014) . Yukarıda bahsedilen tüm avantajlarla birlikte, sosyal medya YÖK'lerin kurumsal stratejisinin özüyle bütünleşir ve sınırların ötesinde pazarlamanın ana araçlarından biridir (Cox & McLeod, 2014) .

### 4.2. Sosyal Medya Platformları Öğrencilerin Yüksek Öğrenim Kurumu Seçimini Nasıl Etkiler?

Kang (2011) , bir vaka çalışmasında bir üniversite tarafından bir sosyal ağ sisteminin reklam aracı olarak kullanılmasını ele almıştır. Bulguları, üniversitenin sosyal ağdaki sayfasını sık sık ziyaret eden öğrencilerin sayısı ile aynı üniversiteye başvurma olasılıkları arasında güçlü bir ilişkiyi destekledi. Alexa, Alexa ve Mari (2012) önceki bulgulara, Facebook sayfaları aracılığıyla görüntülenen bağlantıların, ziyaretçilerin birbirlerinin profillerini favori olarak ekleyerek, beğenerek veya yeniden paylaşarak bilgileri hızlı ve kolay bir şekilde paylaşmasına olanak tanıdığını ekledi. Yukarıdakilerin tümü, Constantinides'e (2012) göre, üniversite ile ilgili reklamın kısa bir süre içinde mümkün olduğunca çok sayıda öğrenciye yayılmasına ve ulaşmasına izin vererek, öğrenci alımının artmasına yol açacaktır.

Qualman'a (2008) göre, birçok üniversitenin kendi Twitter hesapları, Facebook sayfaları ve forumları vardır ve bunlar öğrencilerin seçimlerini etkilemek için öğrencilerle olan iletişim düzeyini geliştirmek ve artırmak için araçlar olarak kullanmaktadır. Ayrıca Constantinides (2012) ve Evans (2009) , sosyal medyayı bir reklam stratejisi olarak kullanmanın, üniversitenin daha fazla iletişim olanağı yaratmasına ve arama sürecinde işe alım görevlileri ve potansiyel öğrencilerle daha fazla doğrudan etkileşim yaratmasına yardımcı olabileceğini doğruladı. Okullar tarafından oluşturulan çevrimiçi topluluklar, bilgi sağlayarak yardımcı olabilecek potansiyel ve kayıtlı öğrencileri bir araya getirir ( Gajić , 2012; Constantinides, 2012). Bloglarda, sosyal ağlarda, forumlarda ve diğer sosyal medya platformlarında akran öğrenciler tarafından sağlanan tavsiyeler, potansiyel öğrencilerin karar verme sürecini daha fazla etkiliyor (Beal, 2014). Bu müşteri kategorisine Z kuşağı müşteriler denir ve yabancıların görüşler ve tavsiyelerinden büyük oranda etkilenirler (Constantinides, 2012).

### 4.3. Çevrimiçi Markalaşma Üniversiteler için Yararları

Sosyal medya platformları üniversitelere, güven, marka sadakati ve anlayış oluşturmayı amaçlayan stratejik mesajlar göstererek daha insani olma ve takipçileriyle etkileşim kurma şansı verir. Bu yön, üniversiteyi çevrimiçi olarak insanlaştırmak olarak adlandırılabilir. Sosyal medyada bir marka hakkında içerik paylaşarak ve oluşturarak markaya dâhil olan öğrenciler daha sadık olma eğilimindedir ve marka ile daha sıkı bir ilişki kurma olasılıkları daha yüksektir. Bu öğrenciler, yalnızca YÖK'lerin markalaşmasında değil, aynı zamanda öğrencilerin çevrimiçi karar verme süreçlerinde de çok etkili

olduğu kanıtlanmış olan E-WOM ve UGC aracılığıyla kesinlikle marka elçileri rolünü oynayacaklardır (Jan ve Ammari, 2016). Bu nedenle sosyal medya platformları, e-müşteri ilişkileri, öğrencilerde duygular ve üniversiteye bir marka olarak dahil olmaya teşvik eden araçlardır ( Turri , Smith ve Kemp, 2013).

### 4.4. Üniversitelerde Stratejik Marka Yönetimi

Yükseköğrenimde, stratejik marka yönetimi büyüyen bir araştırma alanıdır mevcut çalışmalar iki ana araştırma akışına ayrılabilir (WM Lim ve diğerleri, 2018) ilk araştırma akışı, marka değerinin itici güçlerini ve sonuçlarını araştıran marka kavramlarının öncüllerine ve sonuçlarına odaklanır ( Mourad *vd.,* 2011); marka geliştirme ( Garipagaoglu , 2016; Lomer *vd.*, 2018), marka imajı (Wilkins ve Huisman , 2014) ve marka kişiliği (Rutter *vd.,* 2017). İkinci araştırma akışı, marka ekosistemi çerçevesi (Pinar *vd.,* 2011), markalaşma onay süreci (Dholakia ve Acciardo, 2014) ve tüketici karar çerçevesi gibi stratejik yükseköğrenim marka yönetimi çerçeveleri oluşturmaya odaklanır. Yükseköğretimde stratejik marka yönetiminin amacı, en gelişmiş pazarlama stratejilerinin geliştirilmesi ve uygulanması yoluyla üniversitelerin marka değerini yükseltmektir (Khanna *vd*., 2014; Williams ve Omar, 2014; Casidy ve Wymer, 2015). Bununla stratejik marka yönetimi, yüksek öğrenim marka bilinirliğini arttırır (Royo - Vela ve Hunermund, 2016; Foroudi *vd.,* 2017), rakiplere karşı marka konumlandırmasını iyileştirir ve öğrenciler ve mezunlar arasında daha fazla memnuniyet, sadakat ve olumlu iletişim davranışı yaratır (Brown ve Mazzarol , 2009; Stephenson ve diğerleri, 2016).

### 4.5. Üniversitelerde Sosyal Medya Strateji Yönetimi için Bütünleştirici Bir Model

Literatür incelemesinde daha önce, YÖK'lerin stratejik yönetim sürecine entegre edilecek ana sosyal medya ölçevleri, yani içerik, izleyici, kanal ve zamanlama. Bu ölçevler hiç incelenmemiştir, YÖK'lerin pazarlama stratejisinin uygulanmasının bir parçasıdır. Ancak üniversitelerin sosyal medya platformlarını stratejik olarak bütünleştirme ve yönetmeye yönelik bütünsel süreç, güçlü bir çevrimiçi marka stratejisi ve perspektifi gerektirir. Etkin değerlendirme ve kontrol tedbirlerine ek olarak, stratejik yönetim süreci, strateji oluşturma, strateji uygulama, strateji değerlendirme ve strateji kontrolünü içeren dört aşamalı bir süreçtir. Bu araştırmanın temel amacı, sosyal medya platformlarını kullanarak YÖK için yeni bir bütünleştirici model önermektir. Önerilen aşamalar aşağıdaki gibidir:

*1.Aşama: Strateji Formülasyonu*

Bu aşama, ağırlıklı olarak daha önce tartışılan çevrimiçi-markalaşma kavramına dayanmaktadır. Nitekim üniversite markalaşmasını üstlenen (Balaji *vd.*, 2016; Bolat ve O'Sullivan, 2017; Pringle ve Fritz, 2019) gibi birçok çalışma yapılmıştır . Bu çalışmalara dayanarak, bir çevrimiçi markalaşma süreci önerilmektedir. Valitov , (2014) tarafından yapılan araştırmaya göre, üniversite markalaşma süreci, fikir üretme, çevrimiçi marka konumlandırma, çevrimiçi rekabet analizi, çevrimiçi strateji belirleme olmak üzere dört aşamadan oluşur.

*2. Aşama: Strateji Uygulaması*

Bu çalışmada daha önce gözden geçirilen literatüre göre, bu aşamada üniversitenin sosyal medyasının doğrudan rolü, tasarlanan stratejiyi yansıtmaktır. Videolar, forumlar, web sitesi vb. mesaj iletme gücünü

artırır ve zaman zaman çevrimdışı pazarlamanın bile yerini alabilir. Sosyal medya platformlarını kontrol altında ve sistematik bir şekilde tutmak için bu çalışmanın önerdiği başlıca önlemler içerik, kanal, izleyici ve zamanlamadır. “İçerik” ölçüsü, yüksek kaliteli gönderiler, videolar, bloglar, makaleler ve tasarlanan stratejiyle uyumlu herhangi bir ilgili içeriğin tasarlanması anlamına gelir. “Kanal” ise tasarlanan içeriği yaymak için uygun kanal tipini seçmek anlamına gelir. "İzleyici", çevrimiçi etkinliklerin doğasına bağlı olarak her kanaldaki hedef kitledir. Son olarak, "zamanlama", uygun en verimli çevrimiçi trafik zamanını seçme açısından her bir stratejinin uygulanmasında da önemli bir bileşendir.

*Aşama 3: Strateji Değerlendirmesi*

Üniversiteler, sosyal medya platformlarından elde edilen geri bildirimlere dayanarak çevrimiçi stratejinin doğruluğunu, uygulanabilirliğini ve etkinliğini kolayca ve verimli bir şekilde değerlendirebilir. Teknolojinin gelişmesi, herhangi bir üniversitenin hayatta kalması ve gelişmesi için öğrencilerin ihtiyaçlarına odaklanmayı bir zorunluluk haline getiriyor. Ayrıca, üniversitenin sosyal medya platformlarından oluşturulan performans raporu ve analizler, kesinlikle tüm stratejik aksaklıkları giderecek ve daha verimli hedefleme, iletişim ve markalaşma yöntemleri önerebilir. Ek olarak, herhangi bir işletmenin/bireyin tüm sosyal medya platformlarının performansını izlemeyi kolaylaştıran birçok web sitesi ve uygulama vardır. Üniversiteler, onlardan sosyal medya stratejisini değerlendirirken ve izlerken yararlanmalıdır. .

*4. Aşama: Strateji Kontrolü*

Üniversiteler söz konusu olduğunda, önerilen strateji kontrol önlemleri, üniversitenin sosyal medya platformlarından bilgi alan, bunları analiz eden ve uygun mesajı uygun departmana ileten bir veri paylaşım sistemi ve biriminin kurulmasını temsil eder. Örneğin, akademik programlarla ilgili öğrenci şikâyetlerinin akademisyenlere iletilmesi ve öğrencilerin kayıt şikâyetlerinin kayıt departmanına iletilmesi… Bu aşama araştırmanın ileri aşamalarında daha ayrıntılı olarak tartışılacaktır.

**4.6. Kavramsal Çerçeve Ve Araştırma Hipotezleri**

Stratejik yönetimin bağımsız çok aşamalı bir süreç olduğu ve sosyal medya entegrasyon önlemlerinin henüz tanımlanmadığı göz önüne alındığında, sosyal medyanın üniversitelerin stratejik yönetim sürecine stratejik entegrasyonu gerçek bir zorluktur. Bu nedenle, bu bütünleştirici yaklaşımın uyumunu ve aşamalarını oluşturmak amacıyla ve bütünleştirici yönetim teorisi ışığında, Şekil 2'de gösterildiği gibi bu araştırma yepyeni bir kavramsal çerçeve önermektedir:

H1: Strateji oluşturma süreci, üniversitelerin strateji uygulama aşamasını etkiliyor,

H2: Strateji uygulama süreci, üniversitelerin strateji izleme aşamasını etkiliyor,

H2a: Sosyal medya platformlarının içerik türü, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor,

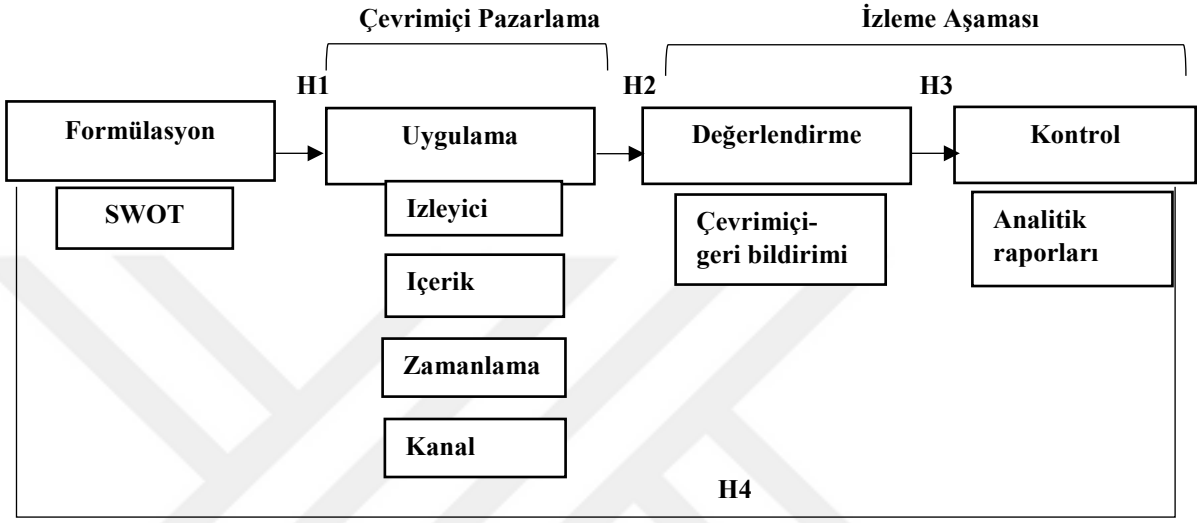
H2b: Sosyal medya platformlarının izleyicileri, üniversitelerin çevrimiçi -pazarlama sürecini etkiliyor,

H2c: Sosyal medya platformlarının zamanlaması, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor,

H2d: Sosyal medya platformlarının kanal türü, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor,

H3: Strateji izleme süreci, üniversitelerin strateji kontrol aşamasını etkiliyor,

H4: Strateji kontrol süreci, üniversitelerin yeni oluşturma süreci sureci etkiliyor.




Şekil 2. Araştırma Çerçevesi

## 5. Veri Analizi

### 5.1. Görüşmeler (Nitel Bulgular)

Zoom video telefon yazılım programı üzerinden üç aylık bir süre boyunca dokuz görüşme yapıldı. Görüşmelerin çoğunluğu açık uçlu sorulardan oluşmakta olup, çok küçük bir yüzdesi kapalı uçlu sorulardan oluşmaktadır. Görüşülen kişilerin örneklemi Türk, Özbek, İngiliz, Hintli ve Rus uzmanlardan oluşmaktadır. Özbekistan, Birleşik Krallık ve Türkiye'deki üniversiteler de çalışmaktadırlar. Tümdengelimle metin analizi yönteminin (Malhotra, 2017) ardından, görüşmelerin analizinin çıktısı, diğer araştırma bulgularıyla birlikte tartışılmaktadır.

### 5.2. SEM Analizi

Toplanmış anket cevapları dört aşırı uç değer silindiği ve diğer on tanesi eksik veri olduğu için bu çalışmada 142 olarak kullanılmıştır ve % 91'lik bir yanıt oranıyla sonuçlanmıştır. Katılımcıların %62,6'sı erkek (89 kişi) ve %37.3'ü kadın (53 kişi), yaşları 28 ile 72 arasındadır. Mesleklerine gelince, %80,2'si (114 katılımcı) akademisyen, %6,3'ü (9 katılımcı) üniversitelerde pazarlama yöneticisi, %9,1'i (13 katılımcı) üst yönetim ve %4,2'si (6 katılımcı) üniversitelerde satış pozisyonundadır. Verilerin güvenilirliğini doğrulamak için, Cronbach's alpha testi uygulandı ( $\alpha = 0.890$). Bu sonuç SEM analizini gerçekleştirmek için tutarlı ve uygundur (Harrison, 1990; Kline, 2016) . SEM ve aracılık etkisi analizinden sonra, yapısal araştırma modelindeki hipotezler aşağıdaki tablodaki tahminler üzerinden yansıtılmıştır:

| | Estimate | SE | CR | P |
|---|---|---|---|---|
| **Strateji Formülasyonu - Strateji Uygulaması** | 0.544 | 0.053 | 5.549 | *** |
| **Strateji Uygulama- Strateji Değerlendirme** | 0.409 | 0.071 | 6.761 | *** |
| **Strateji Değerlendirme - Strateji Kontrolü** | 0.427 | 0.086 | 5.599 | *** |
| **Strateji Kontrolü - Strateji Formülasyonu** | 0.268 | 0.054 | 4.974 | *** |

P: Regresyon ağırlığının anlamlılık düzeyi, ***p < 0.01'de anlamlı

Tablo 2. Varsayılmaman Modelin Tahminleri

### 5.3. Sosyal Medya Veri Madenciliği

Bu araştırmadaki veri analizinin son aşaması, araştırma modelinin "E-markalaşma" aşamasını üstlenir ve aşağıdaki araştırma alt hipotezlerini araştırmaya çalışır:

H2a: Sosyal medya platformlarının içerik türü, üniversitelerin E-pazarlama sürecini etkiliyor,
H2b: Sosyal medya platformlarının izleyicileri, üniversitelerin E-pazarlama sürecini etkiliyor,
H2c: Sosyal medya platformlarının zamanlaması, üniversitelerin E-pazarlama sürecini etkiliyor,
H2d: Sosyal medya platformlarının kanal türü, üniversitelerin E-pazarlama sürecini etkiliyor.

Bu araştırmadaki metin madenciliği süreci, sosyal medya gönderilerinin ham içeriğinin alınmasını sağlayan bilgi erişimi ile yapılandırılmamış metinlerin otomatik olarak işlenmesi ve analizi ile ilgili doğal dil işleme metin madenciliği yöntemlerinin bir karışımıydı (Talib *vd.,* 2016). PYTHON kullanarak şu verileri çıkarıldı: beğeni sayısı, yorum sayısı, görüntüleme sayısı (bir video olması durumunda), gönderilerin başlıkları, hashtag'ler, zamanlama, tarih ve kısa URL kodu. 1 Ocak 2020 ve 15 Haziran 2021 tarihleri arasında dünyanın en ilgi çekici 10 üniversitelerinin Instagram profillerindeki tüm gönderiler alındı. Ardından, gücü ölçmek için kısmi ilgileşim testleri yapıldı. Bu test bir veya daha fazla değişkenin etkisini kontrol ederken iki değişken arasındaki ilişkinin incelenmesidir (Krishnan, 2020). Araştırmanın her bir alt hipotezini test etmek için metin madenciliği verileri kullanarak bir Pearson korelasyon testi yapıldı. Sonuçlar bulgular bölümünde tartışılmıştır.

### 5.4. Hipotez Testi Sonuçları

Yapısal çerçeveye dayalı olarak, bu çalışmanın yapıları arasındaki ilişkilerin test edilmesinin sonuçları aşağıda gösterilmektedir:

| Hipotez | Analiz Sonuçları |
|---|---|
| H1: Strateji oluşturma süreci, üniversitelerin strateji uygulama sürecini etkiliyor. | Desteklendi (Görüşmeler ve SEM bulguları). |
| H2: Strateji uygulama süreci, üniversitelerin strateji izleme sürecini etkiliyor. | Desteklendi (Görüşmeler ve SEM bulguları). |
| H2a: Sosyal medya platformlarının içerik türü, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor. | Desteklenir, korelasyon anlamlıdır (sosyal medya metin madenciliği bulguları). |
| H2b: Sosyal medya platformlarının izleyicileri, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor. | Desteklenmiyor, korelasyon anlamlı değildir. (sosyal medya metin madenciliği bulguları). |
| H2c: Sosyal medya platformlarının zamanlaması, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor. | Desteklenir, korelasyon anlamlıdır (sosyal medya metin madenciliği bulguları). |
| H2d: Sosyal medya platformlarının kanal türü, üniversitelerin çevrimiçi-pazarlama sürecini etkiliyor. | Desteklenir, korelasyon anlamlıdır (sosyal medya metin madenciliği bulguları). |
| H3: Strateji izleme süreci, üniversitelerin strateji kontrol sürecini etkiliyor. | Desteklendi (Görüşmeler ve SEM bulguları). |
| H4: Strateji kontrol süreci, üniversitelerin yeni strateji oluşturma sürecini etkiliyor. | Desteklendi (Görüşmeler ve SEM bulguları). |

Tablo 3. Hipotez Testi Sonuçlarının Özeti

## 6. Bulgular ve Tartışma

Ele alınan araştırma sorularına göre araştırmanın bulguları tartışılmaktadır:

### 6.1. Üniversitelerin stratejik yönetim sürecinde, strateji oluşturma aşamasının strateji uygulama aşaması üzerindeki etkisi nedir?

Bu bulgunun ilk araştırma hipotezini doğruladığını ve işletme stratejisine ilişkin birçok araştırma bulgusu ile uyumlu olduğunu belirtmek gerekir (Brengman , Geuens , Weijters , Smith ve Swinyard , 2005; Jayawardhena , Wright ve Dennis, 2007; Ganesh, Reynolds, Luckett ve Pomirleanu , 2010) . Daha özel olarak, strateji araştırmasının ikincisinden çok daha az olduğu yükseköğrenim sosyal medya stratejik yönetim alanında, ikinci bulguyu destekleyen bazı çalışmalar buluyoruz (Kireyev , Koen ve Gupta, 2013; Baroto, Arvand ve Ahmad, 2014; Greer, Lusch ve Hitt, 2017; Adel *vd.*, 2018) . Diğer yandan, varsayılan modelin test edilmesinin sonuçları, strateji formülasyonu ve strateji uygulaması arasındaki yapısal yolun önemli olduğunu göstermiştir. Hipotez testinin bulguları standartlaştırılmış bir regresyon ağırlığı = 0,295, standart hata = 0,053, kritik oran = 5.549 ve anlamlılık düzeyi $p < 0,001$ gösterdiğinden, bu strateji formülasyonunu ima etmek, strateji uygulamasını olumlu yönde etkiler. Bu nedenle sıfır hipotezi reddedilmiş ve H1 hipotezi desteklenmiştir.

### 6.2. Sosyal medya gönderilerinin içeriğinin üniversitelerde çevrimiçi-pazarlama sürecinin etkinliği üzerindeki etkisi nedir?

Araştırmanın üçüncü bölümünde gerçekleştirilen kısmi korelasyon analizinin sonuçları "içerik türü" (akademik, pazarlama ve öğrenci temelli) kontrol edilirken, "beğeniler" ve "yorumlar" arasında önemli bir pozitif kısmi korelasyon olduğunu göstermektedir. Bu korelasyon mülakata katılan pazarlama yöneticilerin fakirliğiyle desteklendi. Ancak akademisyenler ve üst yönetimden gelen katılımcılar, gönderilerin içeriğini pazarlama departmanın kapsamına girdiğini belirttiler (Bélanger *vd.*, 2014; Rutter *vd.*, 2016; Petrova , 2017; Wali , 2018). Akademisyenlerden ve üst yönetimden gelen bir başka anlaşma da gönderilerin içeriğinin yalnızca pazarlama departmanının kapsamına girdiğidir. Bu bulgu, bir üniversitenin stratejisine uygun olarak tüm tarafların özgün bakış açısını yansıtan uygun bir içeriğin oluşturulmasının önemi konusunda üst yönetime ve akademisyenlere bilgi verilmesi açısından bu çalışmanın önemine daha fazla dikkat çekmektedir.

### 6.3. Üniversitelerin stratejik yönetim sürecinde, strateji uygulama aşamasının strateji değerlendirme aşaması üzerindeki etkisi nedir?

Hipotez testinin sonucu, standartlaştırılmış regresyon ağırlığı = - 0.027, standart hata = 0.071, kritik oran = 6.761 ve anlamlılık düzeyi $p < 0.001$ gerçeğine dayalı olarak anlamlı etki göstermiştir. Standartlaştırılmış regresyon ağırlığı değeri de strateji uygulaması ile strateji değerlendirmesi arasındaki ilişkinin pozitif olduğunu göstermektedir. Ayrıca, görüşmeden elde edilen bulgular, bir stratejinin uygun şekilde uygulanmasının geniş bir değerlendirme olasılığı anlamına geldiği gerçeğini doğrulamıştır. Bu nedenle araştırma sorusu son bulgular üzerinden yanıtlanmıştır.

### 6.4. Sosyal medya gönderilerinin izleyici seçiminin üniversitelerde çevrimiçi-pazarlama sürecinin üzerindeki etkisi nedir?

$p < 0,005$ anlamlılık düzeyinde, kısmi korelasyon testi sonuçları, hashtag ile yorumlar arasındaki korelasyonun 0,102 (0,005'in üzerinde) değerine sahip olduğunu gösterdi, bu nedenle anlamlı değil. Bu bulgu, sosyal medya hedefleme stratejilerini üstlenen araştırmaların çoğuyla çelişmektedir ( SH Lim, 2015; Bolat ve O'Sullivan, 2017; Ogaji *vd.*, 2017; Dağlı, 2020; Perifanou *vd*., 2021) . Yine de, görüşmelerin bulguları, uygun kitle seçimini pazarlama departmanının bir kapsamı olarak gördü (akademisyenler ve üst yönetime göre). Oysa pazarlama yöneticileri, üniversitelerin çevrimiçi-pazarlama sürecinin etkililiği üzerinde etkili bir yön olarak uygun hedef kitle seçimini aradılar. Bu nedenle, araştırma sorusu akademisyenler ve üst yönetim tarafından daha fazla araştırma ve değerlendirme gerektirmektedir.

### 6.5. Sosyal medya gönderilerinin zamanlamasının üniversitelerde çevrimiçi-pazarlama sürecinin üzerindeki etkisi nedir?

kısmi korelasyon testinin bulguları, "beğeni" ve "yorum" sayıları arasında "zamanlama" kontrol edilirken anlamlı (0.363) ve güçlü bir kısmi korelasyon olduğunu göstermiştir. Bu konudaki çeşitli araştırma bulgularına benzer şekilde ortak ilişkiyi onaylamak ( Kimmons, Veletsianos ve Woodward, 2017; Palmer, 2013; Yolcu, 2013). Öte yandan, akademisyenler ve üst yönetim, görevlerin zamanlamasını pazarlama yöneticilerinin bir kapsamı olarak değerlendirdi ve pazarlama yöneticileri,

zamanlama seçiminin çevrimiçi-pazarlama stratejisi üzerinde gerçekten etkili olduğunu düşündüler. Bu bulgu, önceki bulgularla uyumludur (Mahabir Narwal ve Ravi Kant, 2014; Ogaji *vd*., 2017) .

### 6.6. Sosyal medya gönderilerinin kanal türünün üniversitelerde çevrimiçi-pazarlama sürecinin üzerindeki etkisi nedir?

Hipotez testinin sonuçlarına bakarak, "beğeniler" ve "yorumlar" arasındaki güçlü pozitif kısmi korelasyonun, "kanal tipi" kontrol edilirken p=0,0001'de anlamlı olduğu sonucuna varmak kolaydır. Ayrıca görüşmeler, pazarlama yöneticilerinin hipotez testi sonuçlarına destek sağlamıştır. Ancak akademisyenler ve üst yönetim, sosyal medya platform seçimini pazarlama departmanının görevlerinden biri olarak değerlendirdi. Aslında işletme literatürü, bu çalışmanın aynı bulgularını destekleyen ve kurumun çeşitli mesajlarını iletmek için akıllıca bir sosyal medya platformu seçimi öneren yeterli araştırmaya sahiptir (Kireyev , Koen ve Gupta, 2013 ; Perifanou *vd*., 2021).

### 6.7. Üniversitelerin stratejik yönetim sürecinde, strateji değerlendirme aşaması strateji kontrol aşaması üzerindeki etkisi nedir?

Hipotez testinin sonucu, standartlaştırılmış regresyon ağırlığı = - 0.027, standart hata = 0.071, kritik oran = 6.761 ve anlamlılık düzeyi p < 0.001 gerçeğine dayalı olarak önemli bir etki gösterdi. Standartlaştırılmış regresyon ağırlığı değeri de strateji değerlendirme ve strateji kontrolü arasındaki ilişkinin pozitif olduğunu göstermektedir. Bu arada, görüşme bulguları, bir stratejinin doğru değerlendirilmesi ile yan ürünlerinin uygun şekilde kontrol edilmesi arasında olumlu bir etkinin varlığını destekledi. Bu destek, tüm katılımcı kategorilerinden geldi: akademisyenler, üst yönetim ve pazarlama yöneticileri. İkinci bulgu, (Bélanger *vd.* , 20 14; Rutter *vd., 2016*; Petrova , 2017; Wali , 2018) gibi çeşitli araştırmalarla uyumludur .

### 6.8. Üniversitelerin stratejik yönetim sürecinde, strateji kontrol aşaması sonraki strateji oluşturma aşaması üzerindeki etkisi nedir?

Bazı araştırmalar stratejik yönetim sürecinde bu konuya ışık tutmuştur ( Efimov ve Lapteva , 2012 ; Khanna *vd., 2*014; Williams ve Omar, 2014; Casidy ve Wymer , 2015) . Mevcut çalışma, üniversiteler bağlamında ikinci etkiyi araştırmak için bir girişimde bulunsa da ve hipotez testi, standartlaştırılmış regresyon ağırlığı = - 0,027, standart hata = 0,071, kritik oran = 6.761 ve önem düzeyi p < 0,001 olan pozitif bir çıktı verdi. Standartlaştırılmış regresyon ağırlığının değeri, strateji kontrolü ile strateji formülasyonu arasındaki ilişkinin pozitif olduğunu da doğrular. Buna ek olarak, görüşmeler nicel bulguları da destekledi; yanıt verenlerin çoğu, önceki organizasyonel hatalardan ders almanın ve değişikliği yeni stratejiye dâhil etmenin önemini vurguladı. Bu nedenle araştırma sorusu bu çalışma ile ele alınmıştır. Bunun da (Constantinides ve Stagno , 2012; Efimov ve Lapteva , 2012; Obar ve Wildman, 2015; Galan *vd,.* 2015) gibi çeşitli çalışmalarla uyumlu olduğu bulunmuştur.

Temel olarak, tüm araştırma soruları, veri analizi aşamasında kullanılan üç analiz yöntemiyle karşılaştırıldı ve elde edilen bulgular tartışıldı. Araştırmanın çıkarımları ve sınırlamaları da bu aşamada tartışıldı. Bu araştırmanın ana sınırlılıkları örneklem büyüklüğü, araştırma araçlarının doğası ve araştırma örnekleminin kültürel çeşitliliğidir. Örneklemin yalnızca Türkiye, Özbekistan ve Birleşik Krallık olmak üzere üç ülkeden katılımcılardan oluştuğu göz önüne alındığında, bulguların

genellenebilirliği bir dereceye kadar sınırlı olacaktır. Bu nedenle, gelecekteki çalışmalar araştırma araçlarının ve çerçevesinin sonuçlarını başka ülkelerde test edebilir. İkinci olarak, çalışmada kullanılan ana araştırma araçları anket ve görüşmelerdi, gelecekteki araştırmacılar bulguları daha fazla test etmek ve genişletmek için odak grupları gibi daha fazla araştırma aracını dâhil edebilirler. Son olarak, bu analiz için kullanılan örneklem büyüklüğü bir yapısal eşitlik modelleme analizi için tatmin edici olsa da, bulguların daha genellenebilirliği için daha fazla veri toplanabilir.

## ABSTRACT

The fast growth and global reach of social media platforms has rendered it a contemporary dynamic tool for higher education institutions. Used in proactively shaping the university's public image and for crafting a strong and positive brand identity for the institution. Thus, the significant role played by these platforms in higher education implies an in-depth look into its strategic uses in the field.

The trending studies on the use of social media in higher education have undertaken the concept from several perspectives. Mainly trust and loyalty in social media communities (Kang, 2011; Clark, Fine, & Scheuer, 2017), institutional branding activities (Xiong et al., 2018), users' online behaviors ( Holmes, 2016; Bolat & O'sullivan, 2017; Brech, Messer, Vander Schee, Rauschnabel, & Ivens, 2017; Clark et al., 2017), E-WOM (Galan, Lawley, & Clements, 2015; Bolat & O'sullivan, 2017; Xiong et al., 2018) and student's attitudes and perceptions of social media marketing (Almadhoun, Dominic, & Woon, 2011; Clark et al., 2017; Wali & Andy-Wali, 2018) were the main research topics. While most findings stipulated that social media facilitates a dyadic communication enabling students to relate, search, share and contribute to contents as proactive users regardless of their geographic locations. There is still a shortage of academic studies investigating a holistic integration of social media into higher education institutions' strategy. In addition to investigating the measures and processes related to it. Therefore, the current research aims to investigate the possibility of integrating social media platforms into the strategic management of higher education institutions. In this vein, it suggests a new conceptual framework for its' systematic integration.

Three data samples have been collected and analyzed in this research. The first sample was nine in depth interviews from top managers, marketing managers and academics. The output was analyzed using a content analysis approach. The second sample was collected from social media posts of the world's top ten most followed universities, the output was analyzed using partial correlation analysis. While the last sample of 262 surveys was analyzed following a two-step structural equation modeling approach. The analysis findings revealed that almost all research hypotheses implied a significant mediation effect and a positive correlation within the proposed framework.

The implications of this study offer novel perspectives for the university's top management in terms of including social media insights into the long and short-term strategic decisions. For the marketing managers in terms of the optimization of social media marketing and strategy. And offers insights for academics on proper ways to take part of the new hybrid marketing strategies implied by social media platforms.



***Keywords:*** Social Media Marketing, Instagram, Text Mining, SEM, Strategic Management Process, Higher Education Institutions.

**DEDICATION**

To my loving mother,
To my father,
To my second mother “Nafissakhon”,
To my unique friends whose love and support made my research journey possible: Aysun, Lamya, Egemen, Süreyya and Mohammed,

To every researcher seeking to make a difference,

I dedicate this dissertation!

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## ABBREVIATIONS

AI: Artificial Intelligence

AMA: American Marketing Association

ASV: Average Shared Squared Variance

AVE: Average Variance Extracted

CR: Composite Reliability

CRM: Customer Relationship Management

E-WOM: Electronic Word of Mouth

FAQ: Frequently Asked Questions

HE: Higher Education

HEIs: Higher Education Institutions

SEM: Structural Equation Modeling

IR: Information Retrieval

KMO: Kaiser-Meyer-Olkin

MI: Modification Index

ML: Maximum Likelihood

MSV: Maximum Shared Squared Variance

NLP: Natural Language Processing

PPC: Pay Per Click

PPC: Pay Per Mille

SM: Social Media

SMM: Social Media Marketing

SMP: Strategic Management Process

SEO: Search Engine Optimization

SWOT: Strength, Weakness, Opportunity and Threat

UGC: User Generated Content

# INTRODUCTION

In order to meet stakeholders' expectations, universities navigate in a highly competitive environment, and pool substantial efforts in aim to reflect an apprehensible and appealing image of their offered programs and activities, both online and offline (Wali & Andy-Wali, 2018). Additionally, within the proliferation and rising popularity of the online-based marketing platforms, specifically Social Media (SM) platforms, the latter efforts can be directed towards influencing and shaping the perceptions of the universities' target audience(s). And for that, a solid online marketing strategy is considered one of the key success indicators for any Higher Education Institution (HEI) these days (Stukalina, 2014; Felix, Rauschnabel, & Hinsch, 2017).

Promoting a HEI through SM platforms (e.g. social network sites, blogs, online forums, etc.) has become a massive opportunity for institutions aiming to raise their brand awareness, reach potential students, encourage more applications and prompt online interaction (Rauschnabel and Hinsch 2016). However, it is important to remember that an effective branding must be executed within a contemporary and objective marketing strategy (Constantinides & Zinck Stagno, 2011; Constantinides & Stagno, 2012; Galan, Lawley, & Clements, 2015). Which revolves around the process of establishing long-term organizational goals in accordance with available resources (Luoma, Risikko, & Erkkilä, 2016). In fact, this process is one of the most promising management mechanisms for Higher Education (HE) when faced with diversification opportunities and competition risks due to globalization and the increasing role of the virtual factor (Yureva, Yureva, & Burganova, 2016).

Within the latter changes, ample academic research has been conducted in aim to understand and highlight the impact and significance of the change SM is bringing up to the management strategy of HEIs (Yolcu, 2013; Bélanger, Bali, & Longden, 2014; Ahmed, Ahmed, Shimul, & Zuñiga, 2015; Petrova, 2015; Jan & Ammari, 2016; Kimmons, Veletsianos, & Woodward, 2016; Rauschnabel, Krey, Babin, & Ivens,

2016; Wali & Andy-Wali, 2018). Further research also tackled the management strategies of HEIs, in addition to the ways to keep up with the ongoing change the field is constantly facing (Kettunen, 2011; Stukalina, 2014; Felix et al., 2017; Honkanen, Pirjo,Young, 2018; Pringle & Fritz, 2019).

This study precisely undertakes the process of extracting four main metrics for SM integration into HEIs strategic management process namely: "Content", "Timing', "Audience", and "Channel". In addition to examining the four main phases of strategic management process of HEIs namely: "Strategy Formulation", "Strategy Implementation", "Strategy Evaluation" and "Strategy Control". Furthermore, the study was conducted in three countries namely: Turkey, Uzbekistan and the United Kingdom. Hence, the representative sample is comprised of academics, marketing managers, and university top managers from the latter countries.

The study stems from the fast growth of Social Media Marketing (SMM) and its immediate adoption by businesses around the world. And from the necessity of a proper conceptualization of this adoptive process when it comes to HEIs. In line with key research findings in the HE management and marketing context, such as Bélanger et al. (2014) who established the usefulness of SM platforms as a medium of interaction between HEIs and students. In addition to the findings of Shields & Peruta, (2018) demonstrating the impact of SM content on students' choice of HEIs. Hence, the current study takes the task of investigating the incorporative process of SM as a significant objective, within the scarcity of research undertaking the online branding process and strategic use of SMM by HEIs (Huiru, 2011; Brech, Messer, Vander Schee, Rauschnabel, & Ivens, 2017; Bélanger, Bali, & Longden, 2014; Petrova, 2015; Petrova & Kostadinova, 2017; Adel, Zeinhom, & Mahrous, 2018; Degn, 2015; Stukalina, 2014; Barnhart, 2022).

Furthermore, the main significance of this study revolves around its attempt to provide an extensive review of the literature related to both SM and strategic management trends and practices in HE. And its endeavor to propose a conceptual framework systemizing the process. Thus, the perspective and findings of this study will provide answers to several questions pertaining to the use of SM platforms within the HE context. Lastly, the practical implications of the study are of significance for marketing managers in HEIs in terms of managing the SM platforms through developing

innovative SMM skills and techniques. On the other hand, the difference made by integrating SM along the strategic management process is of significance for top management to consider SM platforms as a core marketing tool requiring further attention and grasp.

The management of HEIs has always been an independent field of study from strategic management (Lim et al., 2018). Although, there is an increasing number of works aiming to comprehend the classical perspective of strategic management in relation to university management (Stukalina, 2014; Kettunen, 2011; Adel, Zeinhom, & Mahrous, 2018; Baker, Faircloth, & Simental, 2005; Temple, 2018). Many theoretical and methodological aspects of this process haven't been updated to fit the quick change of HEIs' operational settings (Yureva,2016). From another hand, several research is undertaking SM use and implementation in the HE context (Qualman, 2010; Johnston, 2010; Kettunen, 2011; Constantinides and Stagno, 2012; Stukalina, 2014; Ahmed et al., 2015; Bélanger et al., 2014; Brech, Messer, Vander Schee, Rauschnabel, & Ivens, 2017; Galan et al., 2015; Petrova, 2015; Brech, Messer, Schee, Philipp, & Ivens, 2016; Chizwina, Rabatseta, & Bangani, 2017; Cohen, 2019; Dagli, 2020; Delello, Mcwhorter, & Camp, 2015; Pang, 2020; Shields & Peruta, 2018; Suwinyattichaiporn, Johnson, & Fontana, 2019). Yet, due to the novelty of this area in research, there is still a significant shortage of literature and approach when it comes to integrating SM into the HE management strategy.

Therefore, the current study builds on the findings of Constantinides & Stagno, (2012) and Shields & Peruta (2018) on the impact of SM on the choice of a HEI, and aims to suggest a holistic model to incorporate SM into HEIs strategic management process. In this vein, it works towards developing an integrative framework encompassing the main stages of strategic management combined with the SM integration measures into the HEIs' strategic management, all in light of the integrated management theory.

The overall objective of this research would be the development of an integrative framework that supports and guides HEIs towards adopting an integration of SM platforms into their strategic management plan. While, a set of specific objectives must be met in order to fulfill the study's main objectives:

1. To investigate the nature of impact of the strategy formulation on the strategy implementation in HEIs' strategic management process.
2. To examine the impact of the type of content of the SM posts on the effectiveness of the E-marketing process of HEIs.
3. To explore the impact of the appropriateness of audience choice of the SM posts on the effectiveness of the E-marketing process of HEIs.
4. To explore the impact of the timing of the SM posts on the effectiveness of the E-marketing process of HEIs.
5. To assess the impact of the channel type of the SM posts on the effectiveness of the E-marketing process of HEIs.
6. To investigate the nature of impact of the strategy implementation on the strategy evaluation in HEIs' strategic management process.
7. To investigate the nature of impact of strategy evaluation on strategy control in HEIs' strategic management process.
8. To investigate the nature of impact of strategy control on the new strategy formulation in HEIs' strategic management process.

This research is therefore expected to answer the following questions:
1. What is the nature of impact of the strategy formulation phase on the strategy implementation phase in HEIs' strategic management process?
2. What is the impact of the content of the SM posts on the effectiveness of the E-marketing process in HEIs?
3. What is the impact of the audience of the SM posts on the effectiveness of the E-marketing process in HEIs?
4. What is the impact of the timing of the SM posts on the effectiveness of the E-marketing process in HEIs?
5. What is the impact of the channel type of the SM posts on the effectiveness of the E-marketing process in HEIs?
6. What is the nature of impact of the strategy implementation phase on the strategy evaluation phase in HEIs' strategic management process?
7. What is the nature of impact of the strategy evaluation phase on the strategy control phase in HEIs' strategic management process?

8. What is the nature of impact of the strategy control phase on the new strategy formulation phase in HEIs' strategic management process?

The management theory addresses how managers and supervisors relate to their organizations in terms of the implementation of effective ways to accomplish organizational goals, and motivation of employees to perform to the highest standards (Gorzelany-Dziadkowiec & Fudalinski, 2013). Therefore, HEIs must opt for creating their own and specific strategic management processes, based on various management approaches (Schwaninger, 2001). Integrated management is a holistic and cross-disciplinary management approach (Belak, 2000; Schwaninger, 2001). It combines different perspectives in aim to formulate and implement transcending strategies through ensuring coherence among various business aspects, as well as harmony between the university and the external environment (Gorzelany-Dziadkowiec & Fudalinski, 2013). Thus, the latter does not only combine the efforts of different management approaches into agreement but also unifies them into a larger coherent whole which leads to a value creation that cannot be attained through traditional business models (Schwaninger, 2001).

As HEIs must plan their future activities and meet the quality standards of their stakeholders (Belak, 2000), several management approaches have to be put together and integrate into one coherent strategy when aiming for an updated and advanced management (Kettunen, 2011). In the current study, strategic management is one of the main management theories, whereas SMM is an emerging and developing process. And with the dominance of SM, each HEI has a challenge to integrate these two approaches into one management process. Therefore, this study builds on the integrated management theory in HE (Gorzelany-Dziadkowiec & Fudalinski, 2013), and investigates the process of developing a management framework that encompasses the necessary steps for organizational strategy, governance and performance control for HEIs.

In terms of research steps and design, an exploratory method will be followed in order to conduct this research over the combination of qualitative and quantitative research methods, all throughout three main phases. The first phase is the foundation of the research design. That aims to review the literature related to SM and strategic

management in HE context. In light of the extracted literature, a conceptual model will be suggested integrating both SM measures and strategic management processes in HE. In the second phase, both qualitative and quantitative methods will be utilized throughout the data analysis process. In order to shortlist and determine the nature of relationships and the extent of correlations between the components of the proposed research framework. And to further extract statistically significant patterns between the frameworks' dependent and independent variables regarding the nature of components' interactions. The third and last phase involves the testing of feasibility and extraction of feedback of the proposed framework based on the previous findings. The framework will support HEIs in effectively communicating with their targeted audience(s), in addition to setting the blueprints for further research towards unveiling more on the strategy management process in HE settings.

The methodology to be followed in this thesis is illustrated in Figure 1 below. In addition, the Table 1 displays the several data collection methods to be employed in the current research and the justification for each method's use:

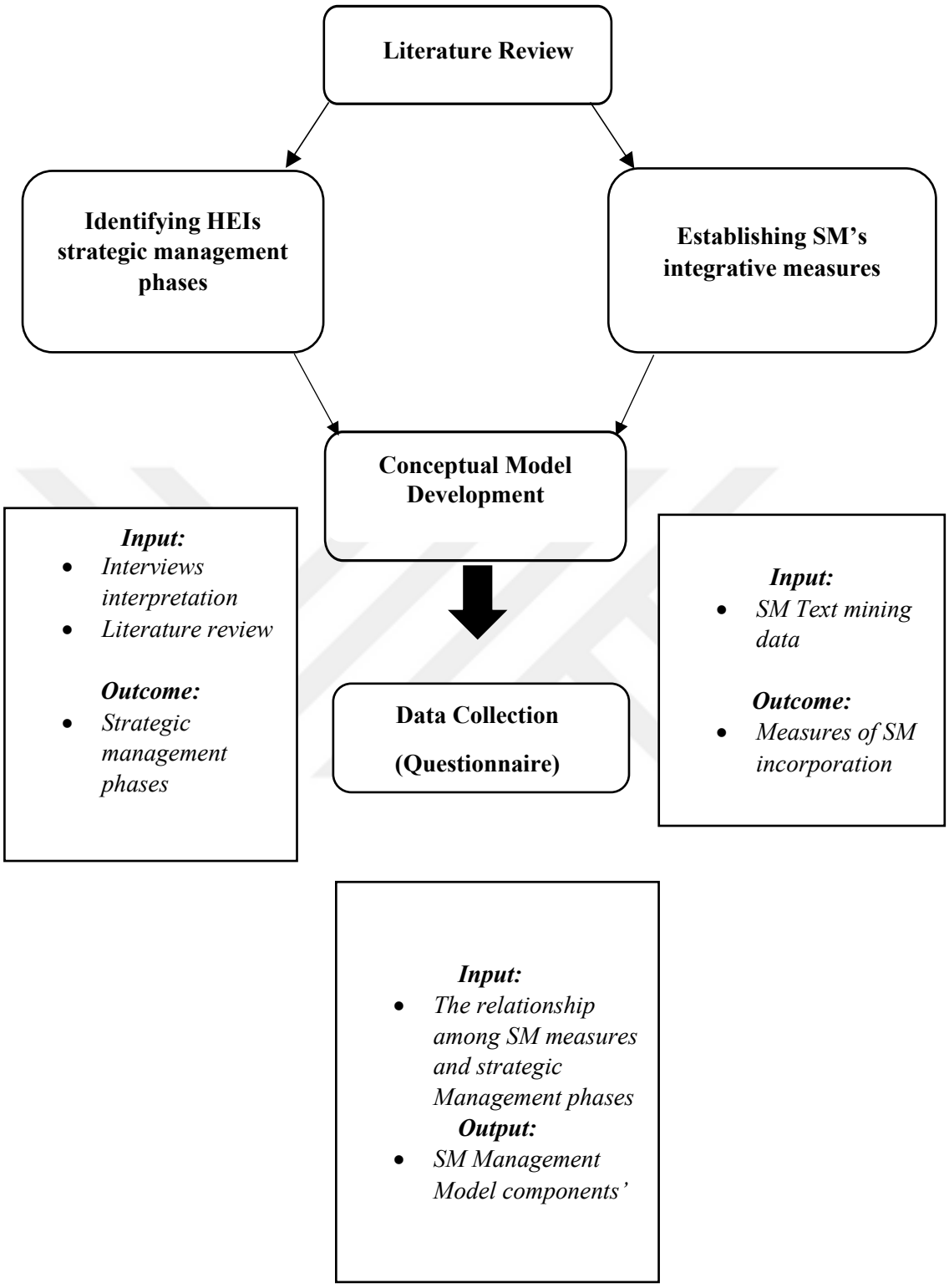



Figure 1. Detailed Illustration of Research Steps and Intended Findings.

| Research Methodology | Data collection Instrument | Analysis Strategies | Justification |
|---|---|---|---|
| **Qualitative** | Interviews | Interpretation<br><br>Content Analysis | To identify the strategic management measures in HE |
| **Quantitative** | SM Text Mining | Interpretation<br><br>Partial Correlation analysis | To identify SM incorporation measures. |
| | Questionnaires | Descriptive stat-analysis<br><br>Structural Equation Modeling analysis | To test the model and hypotheses. |

Table 1. Data Collection Methods

The first chapter of the research represents an introduction and an explanation of the flow of the research. It starts with a presentation of the importance and scope of the study, clarification of the research objectives and framework development methods and finally a display of the research design and data collection methods of this study. The second chapter of the research undertakes a thorough review of the literature related to SM significance and use in HE settings. It starts by presenting the importance of SM in HE, and highlights the main SM platforms currently used by universities. It later discusses the metrics of integrating SM into HEIs online strategic management process, investigates the notion and process of online branding within HEIs and finally

suggests a new framework for integrating SM into the HE strategy. While the last chapter undertakes the qualitative and quantitative methods used to analyze the data of the research, specifies the analysis processes and results of each method namely: interviews, SM data mining and SEM. The chapter's flow goes in accordance with the flow of the research framework (see Figure. 3), in aim of testing each research hypothesis at a time. Starting by (1) displaying the interview process, analysis and findings, (2) Laying down the SEM process and main findings, (3) exploring the SM text mining process and findings. Thus, these analyses have tackled the main phases of the research framework namely: E-branding, E-Marketing, strategy monitoring and strategy control. The chapter then ends with a discussion of the analysis findings in regards to the research questions of this study, and offers the necessary research implications, limitations and future recommendations in relation to the study.

# 2. LITERATURE REVIEW

This chapter of the research undertakes a thorough review of the literature related to SM significance and use in HE settings. It starts by presenting the importance of SM and highlights the main platforms currently used by universities. It later discusses the metrics of integrating SM into HEIs' online strategic management process, investigates the notion and process of online branding within HEIs and finally suggests a new framework for integrating SM into the HE strategy.

## 2.1. Social Media

At a 2010 conference, Eric Schmidt, the CEO of Google stated that:

> *"Every two days, we create as much information as we did from the dawn of civilization up until 2003"* (Holmes, 2016; Simon, 2012).

SM is a broader concept than social networking sites. As according to its definition by Akar & Topçu (2011) it represents the constantly changing and increasing range of interactive user-driven internet platforms, which allow for a non-parallel and asynchronous exchange among users. A more formal definition for it was proposed by Fujita et al. (2017) as any set of interactive technologies serving as a facilitator of the creation or sharing of information, ideas, interests and any other forms of expression through virtual communities and networks. SM platforms provide users with a wide range of common services, which are subjects to a continuous expansion and upgrade. Hence, these platforms share some mutual features that can be summarized in four aspects (Cohen, 2019).

1. Being Web 2.0 applications;
2. Providing user-generated content: text, comments, photos, videos and data;
3. Providing the ability to create service-specific profiles on website and app ;
4. Connecting user profiles of other individuals or groups and facilitating the formation of online social networks.

It is also necessary to mention that all SM platforms operate in a dialogic transmission system (many sources to many receivers) (Kärkkäinen, Jussila, & Väisänen, 2010). In contrast to traditional media which operates under a mono-logic transmission model (one source to many receivers) (Delello et al., 2015). SM represents an effective promotion, communication and marketing tool for corporations, entrepreneurs, non-profit organizations, advocacy groups, political parties and governments. Some of the popular SM platforms are : Facebook, YouTube, TikTok, Instagram, Twitter, WeChat, QQ, Viber, Telegram, LinkedIn, WhatsApp etc., (Rahman, Ramakrishnan, & Ngamassi, 2019; Constantinides & Stagno, 2012; Shankar & Malthouse, 2009).

If we track the history and evolvement of SM over approximately the last decade (2010-2022), we shall notice that the first SM site to reach 1 million monthly active users was MySpace ( Holmes, 2016). However, due to the fast reach and rise of SM use newer websites have reached a massive number of active users as well in a shorter time-lapse. TikTok, as an example, was launched by December 2016, and by mid-2018 the platform already reached half a billion users (Chaffey, 2017). It seems like the latter platform has been gaining about 20 million new users every month over the same period of time (Holmes, 2016). Over the last decade as well, SM platforms have relentlessly worked on shifting their type of offerings to users through expanding the possibilities of interaction and enriching ways of communication within each platform and across platforms. Twitter, initially didn't allow its users to upload videos and images, but today, more than 50% of Twitter content includes images and videos (Holmes, 2016).

Facebook is the most popular SM platform in the world today with over 2.93 billion monthly active users as of the first quarter of 2022 (Holmes, 2016). Followed by YouTube, Instagram and WeChat with 2 billion users. TikTok and Tumblr come third with over half a billion users (Chaffey, 2017). By looking at demographics of SM users it is easy to conclude that most of the users of the major platforms are teens and young adults (Zachos, Paraskevopoulou-Kollia, & Anagnostopoulos, 2018). For example, the popularity of Snapchat and Instagram drops faster with age, since the majority of people under 25 use Snapchat (73%), while only (3%) of people over 65 use it. In addition, the number of women who use Pinterest is twice as high as the number of men using the same platform (Holmes, 2016). While, For Reddit it is the opposite

(IconoSquare, 2018). In fact, SM networks vary in popularity and differ in demographics, and still daily evolving. Research reported that (58.4**%)** of the world's population uses SM with an average daily usage of 2 hours and 27 minutes (Chaffey, 2017). The figure below displays the most popular social networks worldwide for the year 2022.

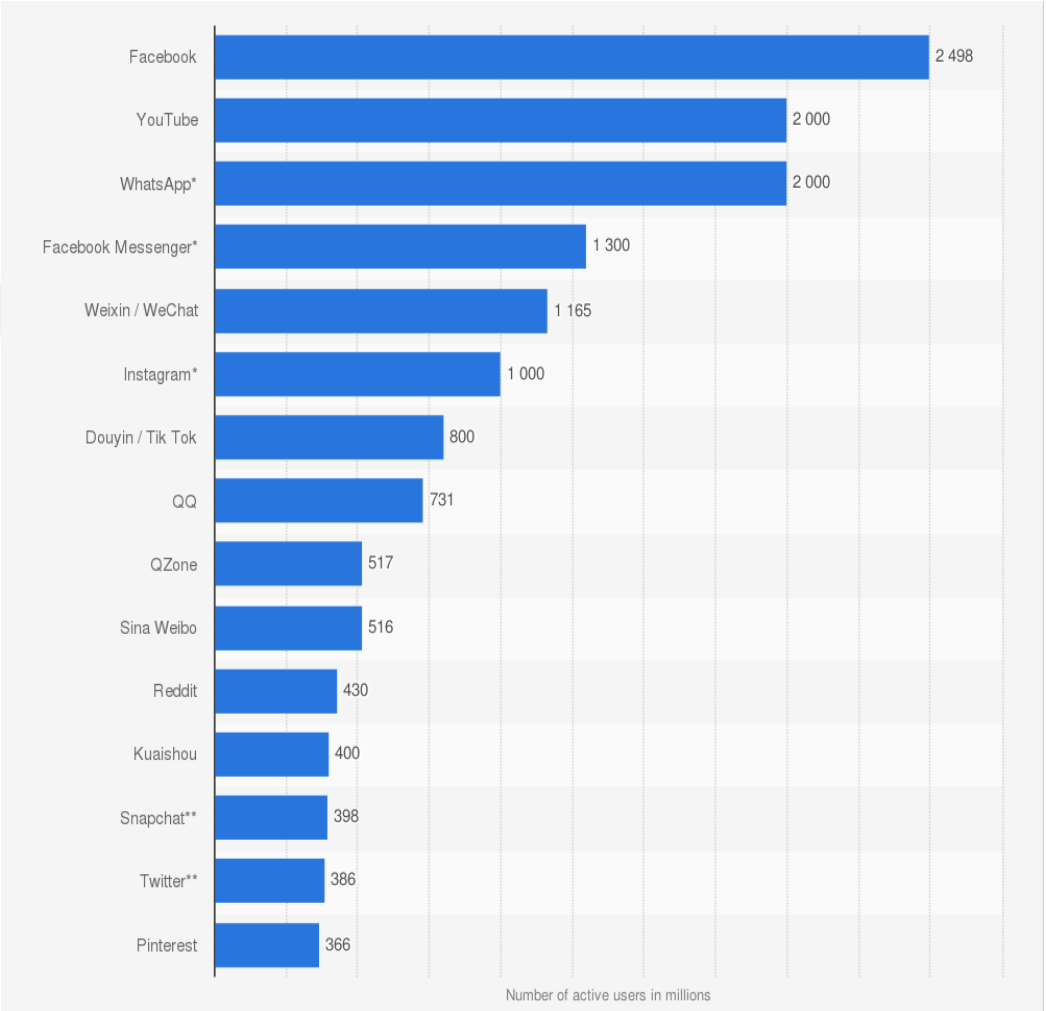



Figure 2. Social Networks Worldwide as of May 2022 by Number of Active Users (Statista.com)

## 2.2. Social Media Types

SM is broader than the mere perspective of it encompassing only social networking sites such as Facebook, YouTube and Instagram. In fact, SM extends way beyond that into containing all the following components: micro blogs, media and file sharing, wikis, discussion forums, blogs, social gaming, social commerce, reviews, monitoring

tools and finally social networks (Chaffey, 2017). Below, the most relevant platforms to the researched topic are briefly defined:

### 2.2.1. Websites

According to its definition it is a page or collection of pages available on the "World Wide Web" containing specific information provided by an individual, an organization or an entity all tracing back to a common Uniform Resource Locator (URL) (Delello et al., 2015).

### 2.2.2. Blogs

A blog is an online journal with its page displayed in a chronically-reverse order, containing any type of information possible about individuals, businesses or entities (Donelan, 2016). Blogs could be hosted for free on websites such as WordPress, Tumblr, and Blogger (Cox & McLeod, 2014) .

### 2.2.3. Wikis

A wiki is a collective website where a participant is allowed to create or modify any page using their web browser (Almadhoun et al., 2011). Wikis are hypertext tools that allow individuals and groups to easily manage content, create static websites, manage online communities, connect customers and businesses and even write magazines and books (Holmes, 2016). A well-known example of wikis is Wikipedia!

### 2.2.4. Social bookmarking

These sites allow users to manage and share links to other websites in order to produce a searchable personalized content. Example: Reddit and Digg (Rahman et al., 2019).

### 2.2.5. Social Network Sites

Social network sites are public, web-based and usually free of charge services allowing users to create and own a profile, connect with and react to others' content and exchange messages (privately or publicly) (Ogaji et al., 2017; Yakob, 2008). Among the most popular social networking sites we find Facebook and LinkedIn (Boyd & Elisson, 2007; Liu & Ying, 2012).

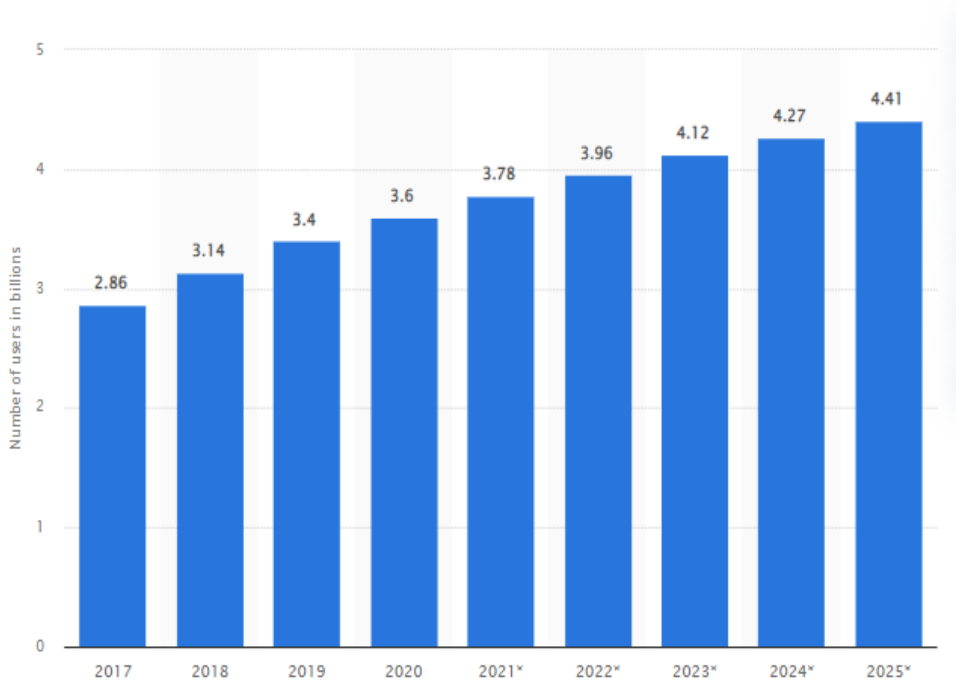



Figure 3. Number of SM Users From 2017 to 2025 (Statista.com)

### 2.3. SMM in The Higher Education Context

The term Social Media Marketing (SMM) has been introduced into the marketing scene in parallel with the emergence and rapid evolvement of SM platforms worldwide (Miller, 2013). And its practice has quickly evolved to become a powerful tool for all types of businesses including HE, and a viable strategy to reach target students who are already exposed and often interacting with other HEIs through similar platforms. This is because good marketing on SM is based on collecting and forming devoted brand advocates and driving traffic to the university's website (Almadhoun et al., 2011; Wali & Andy-Wali, 2018). According to Felix et al. (2017) definition SMM is the interdisciplinary, cross-functional concept which employs SM (in combination with other marketing and communications channels) in order to achieve organizational goals and create value for stakeholders. Examples of stakeholders that universities address via SMM are potential and currents students, its' staff, students' parents and the academic community (Luoma et al., 2016).

In the HE sector, SM tools plays a vital role to provide endless opportunities for marketing managers and content creators to share their content and strategies frequently with stakeholders using the appropriate communication channel(s) with the

appropriate stakeholder(s) (Holmes, 2016; Jan & Ammari, 2016a; Wali & Andy-Wali, 2018). The most important advantage provided by the latter platforms is the frequency immediacy of the content sharing. Which is considered as a powerful tool for HEIs to use for proactively shaping their public image and crafting a strong and positive brand identity (Clark, Fine, & Scheuer, 2017; Felix et al., 2017; Honkanen, Pirjo,Young, 2018). In addition, the published content in all its forms allows students to acquire both general and specific information about the HEI, its activities and offered programs at their convenience and with no costs (Almadhoun et al., 2011; Cox & McLeod, 2014). Thus, social platforms content enhances the overall communication between the institution and its prospects within a strongly displayed brand image (Cox & McLeod, 2014). With all the benefits mentioned above, it is worth noting that marketing for HEIs through SM does not by any means replace the traditional ways in which HEIs communicate with stakeholders (Malthouse, Calder, Kim, & Vandenbosch, 2016). It rather integrates into the essence of the corporate strategy of the HEIs and is one of the main weapons of marketing without and beyond borders (Cox & McLeod, 2014).

It is easy to notice by any internet surfer that almost all universities around the world have their brand pages on various SM platforms. Such as Facebook and Twitter, which are very prominent platforms used by HEIs (Cetin, 2011; Rauschnabel et al., 2016) as a way of increasing brand exposure and student reach (Nevzat, Amca, Tanova, & Amca, 2016). However, it is also worth noting from a managerial perspective that not all HEIs are making successful or appropriate use of this valuable and free asset (Bélanger et al., 2014). In fact, there is very limited to no knowledge about appropriate ways and processes of integrating the strategy of managing these platforms into the management and strategy of HEIs. Whereas, a very important research on SM marketing mechanisms by Peruta & Shields (2017) concluded that having both the managerial and technical knowledge of managing SM pages would increase and uplift the understanding of the theoretical mechanisms of SMM in the HE context. And would also unveil the most effective strategies to be utilized by marketing managers.

### 2.4. The Main SM Platforms Used by Higher Education Institutions

The platforms to be discussed in the literature are: the university website, YouTube, Facebook, Instagram and Twitter.

### 2.4.1. The University Website

A website is the virtual webpage of the university and an immediate window for it to reach its students all over the world (Luoma et al., 2016). The image of the university could be evaluated and reflected upon through its' website (Jan & Ammari, 2016). This image usually includes the HEIs' functional (tangible) and emotional aspects (psychological aspects: example feelings and attitudes of students towards the university) (Alexa, Alexa, & Stoica, 2012; Shields & Peruta, 2018). Thus, the university image according to Lim et al. (2018) is the result of the collective processes reflected on its website. Where students can find and compare many programs and curricula. The structure of websites is influenced by the university's social and organizational goals (Evans, 2009; Luoma et al., 2016). Among which reigns attracting a large number of international students online (Alexa et al., 2012; Luoma et al., 2016; Tavor, 2011)

Balaji, Roy, & Sadeque (2016) have stated that the HE structure is constantly changing and growing fast. Therefore, Wali & Andy-Wali (2018) urged the faculties and departments in every university to focus their promotional efforts on reaching the maximum possible number of students worldwide. And to clearly emphasize the university's statue and accreditations (Fegade, 2017; Shields & Peruta, 2018). Many findings agreed that one of the best ways to achieve that is the focus on the quality and content of the university's website (Brinkhuis & Scholtens, 2017; Fegade, 2017; Shields & Peruta, 2018). In his study, Yonezawa & Shimmi, (2015) found that a website will be valued by both students and parents only when it reflects the branding strategy of the university. Clark et al. (2017) added that every university's website must to provide flawless and accessible information in the simplest of ways, and promote the university as the best choice for students. Van Auken, Chrysler, & Wells (2014) further elaborated that every university must create its own personalized website catering to its' different user groups. It must reflect the harmony in terms of virtual architecture and must demonstrate the various departments of the institution.

In order to create a professional website O'Reilly (2007) suggested that departments must be well framed in order to give an impression of a well-structured university. This involves selecting and maintaining a unified and simple color palette while

displaying the websites' diverse segments. It would also be beneficial to use the same colors of the university logo on its website in order to makes it more real once students compare the real visit to the virtual website (Dennis, Papagiannidis, Alamanos, & Bourlakis, 2016). Mahabir Narwal & Ravi Kant (2014) added that the understanding and clarification of the goals of each department within the university on the website are very important. Jan & Ammari (2016) added that the main purpose is to allow students to find relevant information to their overall needs and aspirations, while at the same time highlighting the university's goals.

Flexibility is also an important aspect to consider in a website. As it helps in presenting the uniqueness in the framework of each faculty, and the uniformity of the design will give visitors an impression of unity (Luoma et al., 2016). Ratliff & Rubinfeld (2010) highlighted the importance of consistency in a website. Nevzat et al. (2016) agreed that the basic construction and features of each website page must remain the same, ensuring homogeneity throughout the whole website. Though, Lim et al. (2018) pointed out that departments or faculties should still be able to customize the content, combine the components and maintain the content relevant and interesting with the clear transmission of individual university's objectives. Another effective tool to attract students to the university's website is visualization (Luoma et al., 2016). Jan and Ammari (2016) mentioned that it does not only ensure better convey of the university's potential and capacities as an international HEI, it further allows overcoming the foreign languages barrier. Luoma et al. (2016) added that visuals are an alternative way of communicating information while supporting the written content within the university's site. In addition, Fegade (2017) stated that a university's website allows the institution to personalize its brand identity through its pages while maintaining the overall coherence and harmony. Liu and Ying (2012) concluded that different homepages can be customized for different user groups such as new visitors, international visitors, and staff. Besides, the possibilities to customize every website are endless: personalized logos, homepages and interactive student calendars all work towards catering to the needs of potential students on the university's website.

According to Alexa et al. (2012), representing the university using a website is a vital communication tool for any HEI. In particular, a website must provide a big amount of information in a very easy and accessible way for students with a lower

dissemination cost (Almadhoun et al., 2011). Rahman et al. (2019) added that the website must contain many interactive features to demonstrate the academic programs offered by the university, display its location, facilities and resources using demos, pictures and videos. Zachos, et al. (2018) concluded that universities began to understand the importance of online presence through a website and now all public and private HEIs own a website.

Furthermore, many researchers have pointed out that the website's quality and design would affect student choice of university. Jan & Ammari (2016) insisted that the effectiveness of information and content on a website are keys to attracting students online. The quality of the website, its design, customer service reliability and security are metrics that have a particularly significant impact on the increase of website traffic. And on earning the trust of students from different countries who can only see the website not the real university. Constantinides (2012) supported the importance of website design towards creating a positive and satisfactory image in students' minds about the university. Brech et al. (2016) endorsed all the previous findings by highlighting that the two most important factors to encourage students to visit a website are the website's image and design and the quality of user experience it offers. Nevzat et al. (2016) proposed in a theoretical framework on a loyalty that websites and online services have an impact on students' choices and loyalty online. As for international students, the first impression they form on a university is through its website (Girard, Trapp, Pinar, Gulsoy, & Boyt, 2017). Thus, the ease and quick navigation, reliability of the services and the clear detailed explanation of the academic programs will certainly drive students' choice and decisions (Constantinides, 2012). Nevzat et al. (2016) also mentioned through an empirical analysis that the smooth user-experience and the availability of information are key factors leading online customer choice and loyalty.

### 2.4.2. The University's YouTube Channel

YouTube is the leader of online video sharing, and the primary destination to watch and share original videos worldwide (Galan et al., 2015). It allows to easily upload and share videos across the internet through websites, mobile devices, blogs and even emails (Galan et al., 2015; Yakob, 2008). For universities looking to enhance their

recruitment efforts, YouTube is a platform to easily share promotional videos to a wider audience (Perifanou et al., 2021).

YouTube has launched its local versions in more than 85 countries around the world and you can navigate YouTube in 13 languages (Veletsianos, Kimmons, Shaw, Pasquini, & Woodward, 2017). From 2015 to 2016, the time spent on YouTube grew 40% faster among adults aged (35+) than adults overall (Ogaji et al., 2017). More interestingly, YouTube is one of the few SM platforms where age demographics are fairly and evenly split (Perifanou et al., 2021). Although studies on the use of YouTube by HEIs are scarce. It is undeniable that YouTube provides a platform for sharing more interactive and engaging video content illustrating and promoting HEIs. The comments, discussion, like, dislike and share features make it no different from other SM platforms in terms of message displaying potential and ability of reaching targeted audiences worldwide (Perifanou et al., 2021). Therefore, this study includes YouTube as a key player SM platform and aims to further investigate its integration measures into the strategic management of HEIs.

### 2.4.3. The University's Facebook Account

Nevzat et al. (2016) perceived Facebook as a social networking site which provides users with a platform to create a personal profile page, add 'friends' and exchange messages. The company was founded in 2004 and became the top-ranked social networking site in the world (Xiong et al., 2018). Facebook connects people with their friends, relatives and others who work, study and live in similar or different parts of the world. It allows users to upload unlimited photos, share links and videos and learn more about the people they meet (Rahman et al., 2019). Facebook has six primary components: personal profiles, status updates, networks, groups, applications and fan pages (Brech, Messer, Vander Schee, Rauschnabel, & Ivens, 2017).

The Facebook "fan page" concept was first introduced on November 2007, and many universities took advantage of the opportunity to create "official fan pages" (Reuben, 2008). By January 2008, the number of universities who owned a Facebook page reached 4200 (Reuben, 2008). Fan pages are pretty much like personal profiles, universities use them to advertise to their programs through wall posts, discussion

boards, photos, videos and many other interactive applications (Brech et al., 2016). The visitors of the page have the choice of becoming "fans" of the university which will display its updates on their personal profiles (Xiong et al., 2018). This feature helps create a promotional effect and encourages friends to like the university's page since they might have the same interests (Peruta & Shields, 2017).

Below are the university ranking stats for the year 2019 providing some information on the adoption of Facebook among HEIs through a list of universities and colleges with an official presence on Facebook. The source states that 9,920 out of a total of 13,723 (72.29% adoption rate) HEIs in the world (included in the uniRank database) have adopted an official institutional Facebook page.

| | *Aug 2018* | *Feb 2019* | *Aug 2019* | *Feb 2020* |
|---|---|---|---|---|
| Total number of universities in uniRank | 13.590 | 13.598 | 13.612 | 13.723 |
| Nbr of universities on Facebook | 9.302 | 9.528 | 9.740 | 9.920 |
| UniRank Facebook Adoption Rate* | **66.44%** | **70.07%** | **71.55%** | **72.29%** |

Table 2. UniRank Facebook Adoption Rate (4icu.org)

Besides the main Facebook page, many universities opt for opening specific additional brand pages for their particular campuses or sports teams (Brech et al., 2017). These pages are usually targeted at specific audiences such as fans of sports, fans of reading, etc. (Wali & Andy-Wali, 2018). As fans users engage with each other. To comment post, rate, like or share the content provided by the university or other users (Brech et al., 2016). Furthermore, universities can integrate content from other SM platforms (e.g. YouTube videos) into their Facebook posts. This makes Facebook a central point of communication for numerous universities (Bolat & O'Sullivan, 2017).

In their comparative study of universities' Facebook profiles Brech et al. (2017) revealed a variance in the effectiveness between universities' Facebook brand pages and fan pages. For example, a big university such as the "University of Illinois" had approximately 245,150 fans. While the much smaller "California Institute of Technology" had around 379,522 fans. And the "University of Michigan" had more than 785,426 Facebook fans. Thus, regardless of size, some universities have a very high number of user interactions, whereas others receive very little interaction and

feedback from fans (Mahabir Narwal & Ravi Kant, 2014; Phi & Kappan, 2015; Shields & Peruta, 2018). These results indicate that some universities are not fully making use of the SM strategies in a way that other universities can also market themselves better. Therefore, the latter fact necessitates the investigation and specification of SM strategic metrics that make a university excel online. Table 3. displays the ranking of world universities based on the popularity of their Facebook page for the year 2021.

| Rank | University | Likes | Country |
|---|---|---|---|
| 1 | Harvard University | 5.514.335 | US |
| 2 | University of Oxford | 3.783.637 | GB |
| 3 | Universidad Nacional Autonoma de Mexico | 3.182.138 | MX |
| 4 | Daffodil International University | 2.747.023 | BD |
| 5 | Hajvery University | 2.334.679 | PK |
| 6 | Uiversity of Cambridge | 2.212.769 | GB |
| 7 | Amity University | 2.039.363 | IN |
| 8 | Universiti Teknologi Kreatif Limkokwing | 2.000.357 | MY |
| 9 | Loverly Professional University | 1.484.689 | IN |
| 10 | Estacio de Sa University | 1.478.427 | BR |

Table 3. Facebook University Ranking Based on the Number of Likes (Statisa.com)

### 2.4.4. The University's Instagram Page

Launched by Kevin Systrom and Mike Krieger on October 2010 ( Lim, 2015) and soon acquired by Facebook on April 2012, Instagram had over 1 billion users by 2018 (Perifanou et al., 2021). Facebook's sizable resources and user-base helped Instagram go stratospheric, eclipsing other visual SM sites like Pinterest and Flickr and becoming the go-to app for photo sharing (Lim, 2015). It now even rivals its parent company Facebook in terms of relevance and equity, particularly among younger users (Lim, 2015). As 59% of internet users aged between 18-29 use Instagram. And 17% of teenagers state that it is the most important SM platform to them. And 90% of its users are under 35 years old (Burgess, Marwick, Poell, Dijck, & Poell, 2017).

The site enables its users to take, edit and post pictures to their feed using a selection of filters. In addition to the ability to share videos and stories, a feature competing with

its rival Snapchat (Burgess et al., 2017). From a HE perspective, a recent research revealed that almost all HEIs are actively present on Instagram which implies continuously increasing competition over brand awareness and student reach (Koroll, Wolfram, & Fuchs, 2022). This finding makes it essential to constantly optimize and evaluate the university's SMM strategies in order to ensure getting the most out of this platform.

Instagram has proven to be effective at driving brand awareness and engagement, and it has quickly become an essential tool for connecting with prospective students online (O 'mahony, Verezub, Dalrymple, & Bertone, 2013). In fact, it may just be the most socially engaging platform, as brand engagement on Instagram is 10 times higher than on Facebook and 84 times higher than on Twitter (Perifanou et al., 2021). This is credited to the visual nature of posts which is perceived to be more universal compared to other sites. Making Instagram content more attractive especially for perspective students ( Lim, 2015; Koroll, Wolfram, & Fuchs, 2022). This marketing platform saves HEIs cost in terms of online brand design. For instance, the hashtag (#) function helps to indicate all the relevant photos and videos of the university available on the main search feed of the platform, which makes it easier for universities to promote their programs and updates (Yolcu, 2013). Moreover, Instagram provides the university marketers with an easier way to understand their customers by analyzing the comments received from the page visitors on the posts and systemize its related feedback (Sophonhiranrak, Suwannatthachote, & Ngudgratoke, 2015). As answering comments and being interactive with students would help in improving the students-university relationship (Gibbs, Simpson, & Macdonald, 2003). Furthermore, Instagram enables direct messaging which allows for private and detailed processing of students' requests. The above-mentioned attributes of Instagram are constantly evolving and changing towards tightening the relationship between the university and all its online audience. Therefore, it is considered as a key SM platform despite the lack of research tackling its multiple branding and strategic benefits to the HEIs' brand management, which is the aim of this research.

### 2.4.5. The University's Twitter Account

According to its definition Twitter is "*an American microblogging and social networking service on which users post and interact with messages known as "tweets". Registered users can post, like, and retweet tweets, but unregistered users can only read them. Users access Twitter through its website interface, through Short Message Service (SMS) or its mobile-device application software ("app"). Twitter, Inc. is based in San Francisco, California, and has more than 25 offices around the world. Tweets were originally restricted to 140 characters, but was doubled to 280 for non-Asian languages in November 2017*". The largest demographic group of Twitter, 37% of users, are between the ages of 18 and 29 (Pringle & Fritz, 2019). 25% of them are aged between 30 and 49 years old (Pang, 2020b). In the early 2010s, and due to the immaturity of the perspective of SM use by HEIs, a definitive use of Twitter for marketing in HE was yet to be defined. Although some research such as Reuben (2008) suggested it can be used along with other SM tools such as student blogs. Nowadays, the studies on the use of twitter in HE have seen some advancement with notable findings (Brech et al., 2017; Jan & Ammari, 2016; Mahabir Narwal & Ravi Kant, 2014; Miller, 2013; Shields & Peruta, 2018; Pang, 2020).

In an investigation of Turkish universities' use of Twitter, the study of Yolcu (2013) has undertaken a comparative analysis of the top 10 state and foundation most-followed universities on Twitter. And findings revealed the existence of 7 main topics dominating the tweets posted by these institutions: Information about the university, the ways of reaching and contacting the university, easier and faster access to information relating to the university and services offered, admissions to the university, announcements and conditions to join events, services and resources, other institutions' activities relating to the university, scientific data and messages of condolences, commemorations, greetings for special days and get-well messages. The latter findings implied that followers of universities on Twitter were able to follow the developments in their university and to learn about their university's perspective through tweets alone (Yolcu, 2013). In another study to investigate the use of SM by Canadian HEIs. Bélanger, Bali, and Longden (2014) collected data from Twitter and Facebook for over six months in order to conceptualize Twitters' role in managing the university's brand identity. Findings implied that the majority of HEIs used Twitter as

a “campus news feed”, broadcasting information concerning campus news and events. Finding also proved that the HEIs focused on academic excellence often tweeted about faculty and student accomplishments, whereas, the HEIs seeking to highlight campus experience tweeted about students’ life and events more frequently (Bélanger et al., 2014).

Consequently, when it comes to considering Twitter as an SMM aspect, studies such as Veletsianos et al. (2017) supported the incorporation of Twitter as part of a broader digital strategy. Bélanger et al. (2014) noted that just like any other marketing campaign, the baseline goal for SMM is to build a strong brand that attracts larger numbers of customers, students in this instance. Other studies on HEIs Twitter use in various countries reported similar results as well (Palmer, 2013; Veletsianos et al., 2017; Yolcu, 2013). Twitter provides: link sharing, retweeting, hashtags (#), the @ symbol to cite a specific user(s) and other branding components. Which have been proved by previous research to be important yet rarely used by most HEIs (Berea, Rand, Wittmer, & Wall, 2015; Cox & McLeod, 2014; Donelan, 2016; Linvill, Mcgee, & Hicks, 2012; Pringle & Fritz, 2019; Veletsianos et al., 2017). Overall, and despite the lack of advanced research on twitter use by HEIs, institutional twitter accounts seemed to portray a positive image of the university and all the activities surrounding it. Its posts must surely reflect institutional strategies and play the role of a PR platform aiming at reflecting the university’s identity and managing its reputation in alignment with its vision and mission. All in a positive way of marketing and branding the university to potential students and stakeholders.

### 2.5. Online advertising

On 27 October 1994, AT&T placed its first clickable banner ad on HotWired (now Wired) with a cost of 30,000 US dollars for the banner’s first three-month run. AT&T has since laid out the foundation for today’s online advertising (Spurgeon, 2017). Today, estimates suggest that online advertising turnover worldwide is around 204 billion US dollars overtaking linear television spending for the first time in history (Chen & Stallaert, 2014). In essence, Online display advertising is about utilizing the internet as an advertising intermediary, where a company’s promotional messages appear on other websites or search engine results (Spurgeon, 2017). Jandal (2011)

defined an online display ad as an affordable way to target a specific customer group with the double advantage of precision in targeting and the ability of wide cover and reach (Tuten, 2008).

In her article on online advertising, Graydon (2003) stated that among the different types of advertisements on the internet and the majority of them take the form of banner ads which is synonymous to display ads. According to Spurgeon (2017) display ads are boxes presented on websites that contain text and graphical images. They are similar to traditional print ads, though published online, with the enhanced capability of incorporating a response device with the ability on the part of interested consumers to click-through to the subsequent website.

### 2.5.1. Forms of Online Ads

Online ads can take many forms: SM ads, video ads, text ads, website ads, Pay Per Click (PPC), Pay Per Mille (PPM) ads etc. Types of ads are constantly evolving yet in this study it can be segmented into three main categories as follows:

#### *i. Banners*

According to Reiley (2014) banner ads are graphic images announcing the name of the university's website with a very brief description. It can also include audio or video content. Nowadays, banners have become the most common format used for display advertising with a large variety of shapes and sizes. Banner ads also allow location choice on every web page to display the ads (Wang et al., 2015).

#### *ii. Pop-ups*

Rouse (2014) defined pop-up ads as a window used for advertising when a program is initiated by a user action, containing an offer for a product or service in its foreground. The pop-up ad is usually smaller than the background interface-windows filling the user interface and usually resembles a small browser window with only the close, minimize and maximize options at the top (Arnold, 2015).

#### *iii. Text only*

Text ads are simply a way of advertising using text-based hyperlinks. It is certainly lacking some advantages of the other graphical ads, but it has some influential

advantages such as downloading almost instantly and not being affected by ad blocking software (Arnold, 2015). For instance, even search engines such as Google or Bing only allow text ads within the search engine result pages (Beal, 2014; Jandal, 2011; Wang et al., 2015).

Online display ads have numerous benefits for the university. Beal (2014) mentioned that it allows universities to reach the widest number of students with a small budget. While Wang et al. (2015) explained that, "The Pay per click (PPC)" advertising rule only requires payment upon clicks on the link of the university ad which allows setting a ceiling for the advertising budget and controlling it through user reviews on how far the advertisement achieved its target. Peker et al. (2021) insisted that it is also important to integrate all online and offline advertising strategies when posting a display ad. Wang et al. (2015) supported making the ad informative, clear, brief and intriguing using statements that create interest in an effective way. While keeping the vocabulary and wording simple and including a call to action since students need to understand what the ad is all about quickly. Another important point highlighted by Tari (2018) was that universities must set the best plan to reach their target audience through investigating what kind of websites would students likely visit, and which search keywords they were likely to use.

Arnold (2015) was mostly concerned with the design of the banner ad. Keeping in mind to highlight the content visually. He also pointed out that if the design of the ad is complex and involved animation it will not be very effective because the content is not highlighted. The placement of the ad on the advertiser's page isn't less crucial (Beal, 2014). Usually, home pages get the most traffic, but other web pages may attract more targeted students (Jandal, 2011). When universities place the advertisements on other websites, they must ensure that those websites have a heavy traffic from the target audience, along with a content which is relevant to both students and the advertisement itself (Peker et al., 2021).

When creating a display ad, simplicity is the first thing to consider. Kornias and Hălălău (2012) suggested that simply choosing a banner ad that contrasts with the background color of the university website itself is more creative than emphasizing the logo or using pictures in order to recommend an academic service. Tari ( 2018) was

more concerned with the abridgement, that the content of the online ad must be easy-to-understand and that the message should be clear and brief highlighting the type of offer. For students, this is less confusing and more concise on the creative aspects of the ad (Jandal, 2011). According to Kornias and Hălălău (2012) most universities assume that animated graphics are more attractive to students. Yet in reality, such design elements keep them away from the ad since the animation is considered distracting.

### 2.6. How SM Platforms Affects Student's Choice of a HEI

Kang (2011) explored the use of a SM for advertising by HEIs in a case study. The findings supported a strong relationship between the number of students visiting the page of the university frequently and their likelihood of applying to this same Institution. Tari (2018) added to the previous findings that the displayed links on Facebook allowed visitors to share information by bookmarking, liking, and re-sharing it to each other's profiles. All the above, according to Constantinides et al. (2012), allows the advertisement about the university to spread and reach more students within a short time leading to an increased enrollment rate.

According to Bélanger et al. (2014) many universities have their own Twitter feeds, Facebook pages and forums which are being used as tools to improve and increase the level of communication with students in order to influence their choices. Constantinides et al. (2012) gave an example how the introduction of an online forum to recruit international students for bachelor programs by a university in the USA was very effective in targeting foreign students, with numbers of international students applying for these bachelor programs increasing drastically. Moreover, Peker et al. (2021) confirmed that using SM as a strategy for advertising could help the university create more communication possibilities and more direct engagement with potential students since the interaction with recruiters and with other students during the process of searching for a suitable university is very important.

The online communities created by schools bring together potential and enrolled students who can help by providing information (Gajić, 2012; Wang et al., 2015). These students' advice and recommendations provided in blogs, social networks, forums and other forms of SM are increasingly affecting other students' decision-

making process (Beal, 2014). In fact, this category of customers is called Millennials (Reuben, 2008) and are most likely influenced in their decision making by the recommendations and advice of strangers (Constantinides et al., 2012).

### 2.7. Review of the Development of SM in Higher Education (2008-2020)

Back in 2008, according to a fundamental research by Constantinides & Zinck Stagno (2013) investigating the impact of SM on university choice. SM was found to be an altering factor of the decision-making process of purchasing behavior of customers. The reason behind that was adding the "transparency" factor into the customers' decision-making process. By that time marketers have already become aware that the increased market transparency provided by SM has significantly weakened the traditional marketing power and its control over the media and communication processes. Thus, new ways to reach potential customers and communicate with them had to be developed (Parise & Guinan, 2008). However, SMM was not considered a complete substitute for traditional marketing yet. Rather, it was viewed as an extension of it. Therefore, what characterized that era of digital marketing, between 2008 and 2013, was the ideology that marketing can only be successful if based on solid foundations such as: innovative high-quality products, market-oriented institutions and well-designed websites (Constantinides et al., 2011). In light of that, the conclusion was that a mere adaptation of traditional marketing practices to SM is not sufficient anymore. Rather, new marketing strategies and approaches ought to be developed in addition to a deeper understanding of customers' nature (students) within the local and international context (Vrontis, Thrassou, & Melanthiou, 2007). Moreover, Bolat & O'Sullivan (2017) concluded that the literature on HE marketing is incoherent, even inchoate, and lacks theoretical models that reflect upon the particular context of HE and the nature of its services.

After few years of SMM practice and learning from on SM platforms, it has been proven accurate by observation that online communities created by HEIs bring together current, potential and other students looking for information and guidance. The recommendations given by community members are found to be affecting the decision-making process of students particularly millennial, who are very much influenced in their decisions making process by recommendations of strangers through

the user-generated content on SM (Constantinides & Zinck Stagno, 2013). This finding has brought the SM literature to a very important notion in marketing which is a "segmentation" of user groups. The concept means detecting and allocation of homogenous groups within heterogeneous markets (Wedel & Kamakura, 2000). Segmentation, in turn have been undertaken by several studies, below we display the main 3 segmentation types which the literature offers:

### 2.7.1. The First SM Segmentation (By Users)

Previous research on the segmenting of online markets was mainly focused on unveiling the taxonomies of the types of online shoppers (Brengman, Geuens, Weijters, Smith, & Swinyard, 2005; Ganesh, Reynolds, Luckett, & Pomirleanu, 2010; Jayawardhena, Wright, & Dennis, 2007). The level of participation has been found to be an effective base for describing the different types of SM users (Li & Bernoff, 2008). Segmenting the market of HEIs is important to understand the market and target the right customers (Vrontis, et al., 2007). Segmentation studies of future students based on SM use are scarce in the literature. However, given the increasing interest of HEIs in digital education (Harris & Rea, 2009; Parker, 2011) and the interest of HE marketers in online marketing, research in this field was expected to expand in the immediate future (e.g. Constantinides & Zinck Stagno, 2011). The highlight of this era is the perspective study of (Constantinides & Zinck Stagno, 2013) on SM use and its segmentation of users based on their activity on the social platforms into three main segments:

- ***Basic users***: low levels of SM use, limited to low levels of entertaining and social activities;
- ***Social users***: an incline towards entertaining and social activities as a motive to use SM. Users are passive and the majority of them is actively engaged in two information exchanging activities: the sharing of pictures and sharing videos;
- ***Informational users***: users are similar to social users in terms of social activities. However, they are more engaged in information-seeking activities.

### 2.7.2. The Second SM Segmentation (By Platform)

With the continuation of the increase in SM popularity, specifically in the HE context. Along with the increase in the number of students seeking education, advice, knowledge, peer shared experiences and similar discussions within the same context. Universities have found themselves forced to involve deeper in these platforms and to seek ways to understand their dynamics and spinoffs. A study to be noted was done by Jan and Ammari (2016) on Malaysian universities, where the impact SM use in the HE context in terms of students' decision-making process while choosing an HEI was empirically measured. Where the impact of three SM platforms used by universities was assessed. The study in its essence has provided more practical insights into the different aspects of SM which are involved in HEIs and students' digital interchange relationship. For example, the study supported a strong relationship between the number of students who frequently visited the page of the university on social networks and their likelihood of applying to this same university.

Alexa, Alexa, and Mari (2012) added that the displayed links via Myspace or Facebook pages permit visitors to share information in a fast and easy way by bookmarking as favorites, liking or re-tweeting on each other's profiles. All the above, according to Constantinides (2012), allows the advertisement about the university to spread and reach as many students as possible within a short period, which will lead to increased student recruitment. According to Qualman (2010), many universities have their own Twitter feeds, Facebook pages and forums which are being used as tools to improve and increase the level of communication with students in order to influence their choices.

Moreover, Constantinides et al (2012) and Evans (2009) have confirmed that using SM as a strategy for advertising could help the university create more communication possibilities and more direct engagement with potential students since the interaction with recruiters and with other students during the process of searching for a suitable university is very important. The online communities created by HEIs bring together potential and enrolled students who can help by providing information (Gajić, 2012; Constantinides, 2012). The advice and recommendations provided by peer students in

blogs, social networks, forums and other forms of SM are increasingly affecting the potential students' decision-making process (Beal, 2014).

As an overall finding, the study concluded the existence of a structural impact of online advertising as well as the significance of the relationship between SM, display ads, websites, students' online decision-making process and their choice of HEIs. Moreover, the findings support the significant impact of SM and websites on students' online decision-making process (Jan & Ammari, 2016).

### 2.7.3. The Third SM Segmentation (By UGC)

The research on this segment took place between (2017-2020) and focused on analytical approaches in terms of the E-WOM and UGC (User Generated Content) extracted from the HEIs platforms. One of the highlights and characteristics of this era is considering students as online customers. Therefore, the literature revolved around student's online behavior. A key study by Bolat and O'Sullivan (2017) has segmented the behavior of students on SM platforms based on their role into three distinct categories:

1. **Students as online content consumers:** for pedagogical and/or personal HE experience purposes;
2. **Students as online content contributors** for pedagogical and/or personal HE experience purposes;
3. **Students as online content creators** for pedagogical and personal HE experience purposes (Muntinga, Moorman, & Smit, 2011).

Furthermore, students' engagement on SM across three types of behavior was thoroughly discussed by the pedagogic literature in that era. Through studies of students as consumers (Veletsianos, Collier, & Schneider, 2015), contributors (Barczyk & Duncan, 2013) and content creators (Barn, 2016). The findings of these studies guided the literature to investigate the notion of engagement in the online context of HE (Calder et al., 2016). And in a digital context, studies such as Calder et al. (2016) called for new ways to assess this engagement such as netnographic studies that can capture individuals' behavioral expressions and experiences. With the digital context equivalent to likes, shares comments (Bolat & O'Sullivan, 2017). The findings of these netnographic studies suggested a conceptualization of the behavioral

engagement using student-generated SM content. Which helps understand the actual behavior and experiences of students as well as their behavioral expressions and experiences as a form of "open source" branding practice (Bolat & O'Sullivan, 2017). After reviewing the most impactful studies related to SM management in HEIs Table 4. recapitulates the most important studies and findings based on empirical analysis. This helps extract the main SM integrative measures into the strategic management process of HEIs.

| Studies \ Measures | Platform(s) | Content | Channel | Audience | Timing |
|---|---|---|---|---|---|
| Adam Peruta et al., (2016) | Facebook | ✓ | ✓ | | ✓ |
| Veletsianos et al, (2017) | Twitter | ✓ | ✓ | | |
| Bélanger, Bali, & Longden, (2014) | Facebook &Twitter | ✓ | ✓ | ✓ | |
| Linvill, et al., (2012) | Twitter | ✓ | | | |
| Yolcu, (2013) | Twitter | ✓ | ✓ | | |
| Kimmons, et al., (2016) | Twitter | ✓ | | | |
| Palmer, (2013) | Twitter | ✓ | | | |
| Stuart et al., (2017) | Instagram | ✓ | ✓ | | |
| Bolat & O'Sullivan, (2017) | Facebook | ✓ | | ✓ | |
| Brech et al., (2017) | Facebook | | ✓ | ✓ | ✓ |
| Balaji et al., (2016) | Twitter | | | ✓ | |
| Shields & Peruta, (2018) | Facebook, Instagram Twitter | ✓ | ✓ | | |
| Suwinyattichaiporn et al., (2019) | Facebook | ✓ | | | |
| Perifanou et al., (2021) | Instagram, Facebook YouTube | ✓ | | | ✓ |
| Current study | Instagram | ✓ | ✓ | ✓ | ✓ |

Table 4. Review of the SM Integrative Measures Based on Previous Literature

## 2.8. Branding

The American Marketing Association (AMA) had defined a brand as every name, term, sign, symbol, design or a combination of all the latter aiming to identify the goods or services of one seller or group of sellers, and differentiate them from those of other competitors (Kotler P., Keller K., Koshy A., Jha M., 2012). Brands are augmented in a way that buyers perceive relevant added value in them, a value which matches their exact needs closely with maintaining these added values in the face of competition (De Chernatony and McDonald., 1992). In addition, Fegade (2017) mentioned that for "service brands", in this case HE, the focus during branding shall be on creating, enabling and keeping "brand promises". A point which will be discussed further in the upcoming sections. Furthermore, branding means communicating brand values and attributes to target audience(s). It is a process that varies from one industry to another, yet, its main components are constant, and involve the different elements of the brand and the way to communicate each of them, in addition to an accurate and deep knowledge of the target audience. (Fegade, 2017).

A higher brand equity implies higher brand loyalty, a large brand awareness and a strong brand association. It not only helps in attracting and retaining consumers, but also influences channel partners, target audience, governments and stakeholders of the business (Fegade, 2017). Another notion worth mentioning here is "brand strategy" which is a strategic decision-making tool different than a "marketing strategy" (Ropo, 2009). As the marketing strategy defines how the products and services will be sold to the target market while the brand strategy is bigger than that. In fact, in encompasses the marketing strategy and goes beyond it to focus on the internal and external brand image and personality to be communicated by the HEIs, in addition to the process of communicating it.

### 2.8.1. Branding of a University Using SM

With the increase of online and offline competition among HEIs, most universities have turned their attention towards evaluating their online and offline reputation and brand perception among their stakeholders. As HEIs must always remain conscious of how they present and communicate their educational services online, differentiate themselves from other institutions' online platforms and assess how these factors

influence their online reputation. For this evaluation to be accurate, it was necessary for HEIs to work on aligning their offline and online branding strategies. The latter alignment has evoked a necessity of establishing an online branding framework which encompasses the universities' online marketing process. And therefore helps diffusing a unified and impactful content through the various SM platforms used by the university within a strategic management approach. This section of the research discusses the definition and relevance of branding and E-branding in HE, in addition to the main steps for branding HEIs online.

### 2.8.2. The Benefits of Online Branding for HEIs

Over the years, universities were able to cope with market changes mainly by differentiating and re-positioning measures (Whisman, 2011). Yet, in order to attain a differentiation, online branding must become part of the institutional dialect, even though most institutions still do make full advantage of it (Kizilbash, 2011). The main objective of branding a HEI is to spread its core values and impact the way it is perceived by target audience(s) (Chapleo, Carrillo Durán, & Díaz, 2011) in an effort to gain an online and offline competitive advantage (Durkin & McKenna, 2011).

The shrinking global boundaries and technological changes have intensified the significance of online branding in HE (Harsha et al, 2011). The strength of a HE brand is represented through its SM platforms in form of the thoughts, feelings, perceptions, images and experiences linked to the brand in the mindsets of its followers. In addition to all what the audiences have learned, felt, seen and heard about the institution over time. Therefore, some of the benefits of branding HEIs online include: attracting students from foreign countries, providing information about the university programs, projecting an ideal image, encouraging communication and exchange among followers over any update, offer or activity of the institution. Previously, HEIs have branded their identities by the use of trademarks such as any word, name, symbol or a combination of it, in order to be identified and distinguished from the competition (Boateng, 2014). But nowadays, all these branding aspects and more are found and utilized through universities' SM platforms. As SM is the number one platform to resort to in order to brand a HEI both locally and beyond borders. Since it enables the institution to build long term relationships and a mutual dialog with all its stakeholders,

spread its messages wider and faster, and use the metrics and analytics from its several platforms in order to analyze the business environment and its key players (Carlsson, 2011).

An E-branding using SM is defined as all communication created by the company and its employees, the consumers, the journalists and the stakeholders. A company can therefore control all the information on its SM and actively work to influence the nature of communication with its target audience(s) (Carlsson, 2011). SM platforms allow universities the chance to be more human and engage with their followers through displaying strategic messages aimed to build trust, brand loyalty and understanding. This aspect can be called humanizing the university online, in order to gain this competitive advantage HEIs must become closer, friendlier and more reliable.

Students involved with the brand on SM by sharing and creating content about it, tend to be more loyal and more likely to have a tight association and relationship with the brand. These students will certainly play the role of brand ambassadors through the E-WOM and UGC that is proven to be very impactful not only on the branding of the HEI but also on students' online decision making process (Jan & Ammari, 2016). Therefore, SM platforms are tools for creating E-customer relationships, emotions within students and encouragement to be involved with the university as a brand (Turri, Smith & Kemp, 2013).

The latter aspect of creating emotions on SM have is heavily related to the content displayed on the platforms. Therefore, the university message online must be emotionally-rich, and show the human aspects of the institution. This could probably get students to co-create the brand together with the university through UGC (Turri et al., 2013). Therefore, Turri et al. (2013) emphasized that content on SM ought to be relevant to students. In fact, it must stem from their own requests, interests and academic aspirations with a strong push and emphasis on engaging them to share the content and express their opinions about it.

### 2.9. Strategic Brand Management Importance in HEIs

Lim, Jee, & Run ( 2018) stated that "*Strategic brand management is a systematic and structured management process that develops and nurtures an effective portfolio of*

*strong brands by identifying and establishing brand positioning and values, planning and implementing brand marketing programs, measuring and interpreting brand performance, and growing and sustaining brand equity*". This process is undertaken by HEIs who understand its value and importance for brands and branding (Buil, Martinez, & De Chernatony, 2013; Davcik, Da Silva, & Hair, 2015; Raggio, Leone, & Black, 2014).

In HE, strategic brand management is a growing area of research. Existing studies can be segregated into two major research streams (Lim et al., 2018): The first stream focuses on the antecedents and consequences of brand concepts investigating the drivers and outcomes of brand equity (Mourad et al., 2011), brand development (Garipagaoglu, 2016; Lomer et al., 2018), brand image (Wilkins & Huisman, 2014), and brand personality (Rutter et al., 2017). The second stream focuses on creating frameworks of strategic HE brand management such as the brand ecosystem framework (Pinar et al., 2011), the branding approval process (Dholakia & Acciardo, 2014) and the consumer decision framework (Stephenson et al., 2016) that serve to guide the evolution and development of strategic management of HE brands. The purpose of strategic brand management in HE is to upgrade the universities' brand equity through the development and implementation of the most advanced marketing strategies (Casidy & Wymer, 2015; Khanna et al., 2014; Williams & Omar, 2014). By that, strategic brand management increases HE brand awareness (Foroudi et al., 2017; Royo-Vela & Hunermund, 2016), improves brand positioning against competitors and generates greater satisfaction, loyalty and positive communication behavior among students and graduates (Brown & Mazzarol, 2009; Casidy, 2013; Stephenson et al., 2016).

### 2.10. An Integrative Model for SM Management in HE

In the previous parts of the literature review four main SM metrics namely: "timing", "channel", "audience" and "content" were extracted in aim to be integrated into the strategic management process of HEIs. And although these metrics are part of the implementation of the marketing strategy in HEIs, this holistic process of strategically integrating and managing the universities' SM platforms requires a strong online branding strategy and perspective. In addition to efficient evaluation and control

measures. The strategic management process is a four stage process including: strategy formulation, strategy implementation, strategy evaluation and strategy control. The core aim of this research is to suggest a new integrative model for HEIs strategy using SM platforms. And the suggested phases are as follows:

### 2.10.1. Phase 1: Strategy Formulation

This phase relies heavily on the previously discussed concept of E-branding. In fact, there were many studies undertaking the university branding such as (Balaji et al., 2016; Bolat & O'Sullivan, 2017; Pringle & Fritz, 2019). Based on the latter studies this research suggests the following online branding process:

***Online Branding process:***

Based on the study by Valitov (2014) the university brand development is based on the key success factors of the educational institution. The process of university branding consists of the following four stages namely: idea generation, online brand positioning, online competitive analysis and online strategy determination.

***Idea Generation:***

This step happens more or less offline. It includes a generation of ideas which represent the main strategy of the HEI. At this stage it is worth to base the idea generation on two main components. The Aaker model (Rauschnabel et al., 2016) and the core values of the institution. In the book "building strong brands" which he published in 1995. David Aaker introduced his famous "Brand Vision Model" (Tulay et al., 2017). Originally called the "Brand identity model" and now commonly referred to as the "Aaker model". The model outlines how a company can attain brand equity, emphasizes the importance of brand identity and offers unique solutions to build brand. The model has four different brand topics: awareness, loyalty, perceived quality and brand associations (Fegade, 2017).

From a HE perspective, the Aaker Model is a foundational point of emphasis for universities towards constructing a distinct brand. The model provides scope for HE marketers when developing online campaigns, and it further offers them helpful elements for efficient outcomes. Furthermore, the concept of "Online Brand

Personification" can help HEIs develop a strong brand identity online and offline. As it urges HEIs to work on the association of the university with a humanized aspect of students' lives. Therefore, the idea generation step must work on sculpting a branding strategy based on emotions and values which are notions commonly associated with the university. Furthermore, the model enables HEIs to measure students' perception of the online content provided on SM. This includes examining the way the different posts are perceived, which target audience will be using it and what kind of characteristics are aligned with it. As sometimes the intention a company has for its branding messages doesn't always coordinate with the resulting feedback. Lastly the model emphasizes maintaining the uniformity of the university's images and symbols online. The logo of a brand is of major importance in building brand identity too, each time it is displayed online it is immediately associated with the university.

When generating ideas of the brand strategy, it is highly important to involve all the relevant departments in the process through extracting the main points of focus, which are the added-value and the competitive advantage of each and every department. Which will serve as input to be projected through the SM outlets of the HEI later. However, these ideas and concepts must be put in a systematic way fitting the online context and the nature of the platform to be displayed on. For instance, a campaign promoting an upcoming academic year's offered programs must be based on the input from academics. Modelled in alignment with the core values of the university and illustrated through the marketing managers of the HEI. It therefore will represent a "brand promise" revolving around the HEI's core values (mission, vision, etc.). And must be understood, reinforced and repeated throughout the organization often enough that everyone fully comprehends the central driving idea behind it. As the core values of the university are the backbone of its brand. And a brand can only be built based on clear and detailed brand values. Therefore, we could conclude that the first step of creating a brand strategy which is "idea generation" must be done collectively, in-depth and through identifying the core values of the university.

***E-Brand Positioning:***

The strategic brand marketing efforts for the online audience should convey a strong, exceptional and distinctive identity and strengthen the positive associations of the university's brand identity online in students' and parents' minds (Balaji et al., 2016).

At this stage, and after setting clear the main ideas of the HEI online branding strategy, the E-brand positioning step comes next. The concept itself represents an important strategic effort for today's universities (Chapleo, 2011). Rauschnabel, Krey, Babin, & Ivens (2016) provided a key step in developing the university's brand personality and identified six brand personality dimensions which must be projected through SM depending on the chosen strategy and competitive advantage to be focused on. The dimensions are: (1) Prestige: implying that the SM platform will display an accepted, leading, reputable, successful and considerable image of the university. Universities could gain a prestigious personality online by carefully selecting the main audience(s) to engage with. Any direct or indirect contact of an individual and even a mere association with a brand can shape some brand personality related perceptions (Plummer, 1985; McCracken, 1989). (2) Sincerity: which involves displaying a humane, helpful, friendly, trustworthy and fair institution online. (3) Appeal: meaning to project an attractive, productive and distinct institution. Through identifying how special or attractive potential stakeholders perceive the institution to be, universities can leverage perceived benefits to differentiate themselves from the competition (Rauschnabel et al., 2016). (4) Livelihood: implies an athletic, dynamic, lively and creative university settings. In the USA students associate many universities with their sports teams over and above academic prowess (Toma & Cross, 1998). Some universities have separate Facebook pages for their sport teams drawing fans from all over the world. Such pages can be considered excellent platforms for conveying branding messages due to their massive reach and high interactivity. (5) Conscientiousness: which is the case of an organized, competent, structured and effective university. This can be displayed online through the organization, speed and effectiveness of response, engagement, targeting, and presenting of the online content to the students. And finally, (6) Cosmopolitan: which is a much needed online brand positioning within the international competition and it reflects a well networked, international, cosmopolitan HEI through SM platforms. The level if "cosmopolitanism" indicates whether students view the university as a closed or an open institution. It is forcibly related to the country's identity as well (Rauschnabel et al., 2016). This dimension plays an important role as students evaluate HEIs based on the available content on their SM platforms. Therefore, displaying an image of a stable and cosmopolitan university provides a strong competitive advantage. Another aspect

to be highlighted at this step is the perspective and model of "L. Jean Harrison-Walker" (Harrison-walker, 2016). Who believes that the concept of positioning has a close relationship with both institutional brand and reputation. Positioning is how a HEI is perceived in the minds of students, and competitors (Harrison-walker, 2016).

According to Harrison-walker (2016); HEIs should consider four basic marketing components that influence positioning. Which are the "four Ps of marketing:" Product shall be (academic services), price (tuition and financial aid), promotion (marketing and communications), and place (the delivery system of academic services, such as school size, class size, and student-to-faculty ratio). When projected on the online branding settings of universities, the above mentioned components must be constantly presented through the SM platforms of the institution in addition to its website which can display further details. Walker also emphasizes the concept of "brand promise" in the brand positioning context. Which is the actualization of the brand message communicated to the university stakeholders. Including students, employees, alumni, and funding agencies. It is the "expression" of what stakeholders can expect from their interactions with the institution over time. And as Dr. Jim Black, president and CEO of a strategic enrolment management firm argues: "*delivering on the promise of the brand is the single most important aspect of branding a higher education institution.*" (Harrison-walker, 2016).

***E-Competitive Analysis:***

After clarifying the branding strategy in the first phase and laying out the ground for the online positioning approach, comes the E-competitive analysis step. When formulating a branding strategy for a HEI. And before going further into the E-competitive analysis, it is worth to mention that the online competitive analysis does not decrease the need for the offline competitive research protocols. In fact, research made offline on the university strategy must be performed in order to be taken advantage of in terms of synchronizing with the online research output. A thorough research will generate important and much needed information on target audience(s), the market environment, industry and strengths and weaknesses of the HEI. Therefore, the university must conduct a SWOT (strength, weakness, opportunity and threat) analysis exploring its internal strengths and weaknesses as well as the external opportunities and threats posed by the competitors. A detailed competitor analysis is

also of great importance in identifying how the value proposition of the university will stand out and through which strategies and measures would it be applied (Ropo, 2009). In the classic literature, the competitive analysis is always done internally and externally, and the online projection of this concept is not very different. In this vein, online internal and external performance and competitors' analysis must be performed by HEIs. The Internal analysis of a HEI's branding potential should revolve around assessing the main SM platforms of the HEI against the main E-marketing performance metrics such as: the number of followers on each platform, the engagement level, website usability, appropriate SEO (Search Engine Optimization), current online advertising budget and availability, etc. Most of these data can be extracted from the analytics reports of the SM accounts of the university and analyzed by marketing experts and digital data analysts, to be later built upon when formulating the online strategy of the university.

The external analysis is not much different, as it employs the same process of the internal analysis. Taking into consideration that the output will not be much detailed. However, it focuses on the competitors' online presence, extracting relevant data from their various SM platforms, and comparing it to the university's current online performance reports. It can even extend to adopting the most successful practices of competitors if necessary. Which is a very common practice online! Another important segment of E-research which HEIs should focus on is to investigate the habits and values of the university's target audience(s), identify patterns in followers' online behavior and develop mechanisms of creating an online emotional connection with them as mentioned previously in the brand personalization aspect.

At this point, the university should be able to list the online points of difference and points of similarity with its competitors (Ropo, 2009). Points of difference differentiate the institution online in a positive way, and urge students to choose it over competitors. While the points of similarity help illustrating the ways to outperform competition online by presenting better content and customers value. Overall, all the information gained from the research will also provide insight as to how and which online media should be used for communicating with students and stakeholders in order to achieve the best results. In short, the third step of forming a brand strategy is to conduct a thorough online and offline research by which the HEI will be able to identify its

challenges and opportunities. The more information is available on the target market, the better the branding! (Ropo, 2009).

***E-Strategy Determination:***

This is the last step of the first phase of strategic management process of SM platforms in HE. After generating ideas of the branding strategy, determining the E-branding context, performing online and offline internal competitor analysis and research, comes the step of sorting and compiling the output from the latter steps and conceptualizing it to a complete and formulated the online strategy. At this stage, it is worth to highlight that the university must maintain a very tight level of conformity and unity between its classic offline marketing strategy and its online marketing strategy. This does not forcibly mean that universities must apply the same measures online and offline. It rather means operating in an Omni-channel context and utilizing SM platforms as a potent tool of conveying strategic messages and promoting the university's programs and activities.

### 2.10.2. Phase 2: Strategy Implementation

The second phase of the SM strategic management model is implementing the formulated strategy. In this phase the SM platforms play a major role in illustrating the designed strategy. As in enabling HEIs to create and disseminate value-oriented information and ideas through virtual networks (Obar & Wildman, 2015). SM tools help to facilitate the effectiveness and conveying of the HEIs management strategy. A key reason for incorporating SM into the HE marketing strategy is that it is an interactive medium that creates and promotes student reach and accessibility, and makes information readily available for the targeted audience. Felix, Rauschnabel and Hinsch (2017) described SM integration process into HE from an operational level as the use of SM for promoting universities offered programs and services systematically (Wali, 2018). Some studies have recommended the integration of SM into HEIs strategy implementation process (Rutter et al, 2017, Bélanger, et al, 2014; Petrova, 2017; Wali, 2018). Since the latter enables creating strong student-university affinity and provides an immediate medium for students to share their experiences and express their concerns in a form of a feedback.

Strategy Implementation implies putting the designed strategy into action as intended (Hinsch, 2017). From an online perspective, strategy implementation includes shaping and altering the decision making processes of the university's target audience (Bélanger, et al., 2014). According to the previously reviewed literature in this study, the direct role of university's SM at this stage would be to display the designed strategy through its main features such as posts, videos, discussion forums, website, etc. and as SM is constantly evolving numerous features are being added which increases the power of conveying a message, and substitutes offline marketing at times. The main metrics suggested by this study in order to keep SM platforms under control and in a systematic fashion are: the "content", "channel", "audience", and "timing". The metric of "content" implies designing high quality posts, videos, blogs, articles and any related content in alignment with the designed strategy. While, the "channel" stands for choosing the appropriate platform to diffuse the designed content. "Audience" refers to the target audience on each channel depending on the online activity. And finally, "timing" is also a key component in implementing each strategy in terms of choosing the appropriate most efficient traffic time.

### 2.10.3. Phase 3: Strategy Evaluation

It is vital for a HEI to evaluate the online performance of its strategy, as Bob Napier, CIO, Hewlett-Packard said '*You can't manage what you can't measure*'. (Chaffey, 2017). This step involves analyzing the output of the online strategy against the previously set strategic goals of the university (Ropo, 2009). Based on the feedback generated from SM platforms, universities can easily evaluate the accuracy, applicability, and efficacy of the online strategy. As technology develops, it makes the focus on students' needs a necessity for any university's survival and thrive. Furthermore, the performance reports and analytics generated from SM platforms of the university will certainly mend all the strategic downfalls and can suggest more efficient targeting, communication and branding methods. Additionally, there are many websites and apps to facilitate the monitoring and boost the performance of SM platforms.

### 2.10.4. Phase 4: Strategy Control

The last phase of HEIs strategic management is a control of the ongoing strategy. This processes intends to monitor and improve the performance of an organization and is known in business operations' research as "performance management systems", a process based on the study and analysis of performance-measurement systems. In the case of HEIs, suggested strategy control measures represent an establishment of a data sharing systems and units, which extracts information from the SM platforms of the university, analyses it and forwards the appropriate message to the appropriate department(s). For example, forwarding students online complaints on the academic programs to the academicians and forwarding the students' registration-related complaints to the registration department.

## 2.11. Integrated Management Theory in Higher Education

The management theory addresses how managers and supervisors relate to their organizations in terms of the implementation of effective ways to accomplish goals, and motivate employees to perform to the highest standards (Kettunen, 2014). Therefore, HEIs must opt for creating their specific strategic management processes based on various management approaches (Kettunen, 2016). Integrated management is a holistic and cross-disciplinary management approach (Kettunen, 2011, Kettunen, 2014). It combines different perspectives to formulate and implement transcending strategies through ensuring coherence among various business strategies, as well as harmony between the university and the external environment (Kettunen, 2011). Thus, the latter does not only combine the efforts of different management approaches into agreement, but also unifies them into a larger coherent whole which leads to a value creation that cannot be attained through a traditional business model (Kettunen, 2016).

As HEIs must plan their future activities and meet the quality standards of their stakeholders (Kettunen, 2016); several management approaches have to be put together and integrate into one coherent strategy when aiming for an updated and high-quality management (Kettunen, 2011). In the current study, strategic management is one of the main management theories, whereas SM management is an emerging and developing practice. And within the dominance of the latter, each HEI has a challenge

to integrate these two approaches into one management process. Therefore, this study builds on the integrated management theory in HE (Kettunen, 2011), and investigates the process of developing a management model that encompasses the necessary steps for organizational strategy, governance and performance control by HEIs.

### 2.12. Conceptual Framework

The strategic integration of SM into the strategic management process of HEIs is real a challenge. Given that strategic management is an independent multiple phase process and SM integration metrics are still undefined yet. Therefore, in aim to establish the cohesion and stages of this integrative approach; the study suggests a brand new conceptual framework encompassing the research hypotheses (mentioned below) of this study. The framework is displayed in Figure3.:

**H1: The strategy formulation process impacts the strategy implementation phase of HEIs.**

**H2: The strategy implementation process impacts the strategy monitoring phase of HEIs.**

***H2a: SM platforms' content type impacts the effectiveness of the HEIs E-marketing process.***

***H2b: SM platforms' audience impacts the effectiveness of the HEIs E-marketing process.***

***H2c: SM platforms' timing impacts the effectiveness of the HEIs E-marketing process.***

***H2d: SM platforms' channel type impacts the effectiveness of the HEIs E-marketing process.***

**H3: The strategy monitoring process impacts the strategy control phase of HEIs.**

**H4: The strategy control process impacts the overall strategic management of HEIs.**

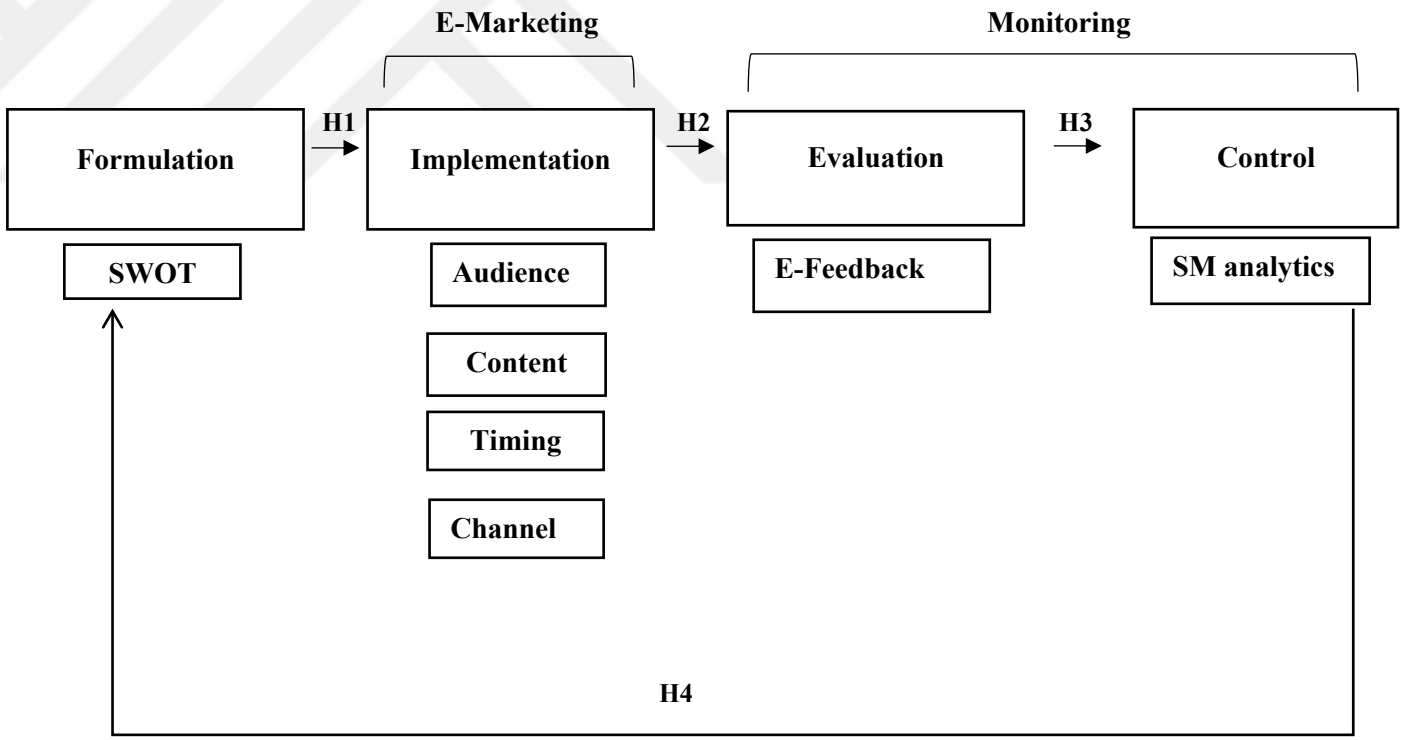



Figure 4. Research Conceptual Model

## 3. DATA ANALYSIS AND FINDINGS

This chapter undertakes the qualitative and quantitative methods used to analyze the data in this research. Particularly, it breaks down the processes and results of each analysis method namely: interviews, data mining and SEM. The chapter's flow goes in accordance with the flow of the research model in aim of testing each research hypothesis at a time. Starting by (1) displaying the interview process, analysis and findings. (2) Laying down the SEM process and main findings. (3) Exploring the text mining process and findings. The chapter then concludes with a display of the results and implications, followed by a demonstration of the theoretical and managerial contribution of the research. The limitations of the study are also discussed in addition to the directions and suggestions for further research.

### 3.1. Interviews (Qualitative Findings)

In aim of unveiling the extent of SM's organizational impact, the researcher intended to conduct a series of semi-structured interviews. Following a deductive interview text-analysis approach (Malhotra,2017). Attendants were experts involved in SM management and content creation in HE. In addition to several university top and middle managers, academics and practitioners.

The structure of the interviews was developed based on the progressive development and recapitulations of the HEIs strategic management framework suggested at the end of the literature review part of this research (Malhotra, 2017). A series of nine interviews were conducted with staff and academics from several HEIs with an emphasis on their perspective and understanding of the current practices and impact of SM platforms. The respondents' feedback assisted in the construction of the research questionnaire as well. The number of interviews depended on different factors such as the job description, interest and prior knowledge of SM's use in HEIs. In addition, when it comes to the sufficiency in the number of interviews, a saturation point must be met in order to draw helpful conclusions (Pascale, 2015). Hence, nine interviews were conducted over a period of three months using the video telephony software

program Zoom and face-to-face. The majority of the interviews consisted of open-ended questions, with a very small percentage of close-ended ones.

### 3.1.1. Respondents' Characteristics

The sample of interviewees was compromised of Turkish, Uzbek, British, Indian and Russian experts. Working at HEIs in Uzbekistan, United Kingdom and Turkey. Table 5. below displays the demographic characteristics of the interviewed sample:

### 3.1.2. Interview Results

Following the deductive text-analysis method (Malhotra, 2017), the results of the interviews' analysis are displayed in Tables. 6,7,8 and 9 as per category of analysis, keywords and quotes from respondents' answers. The followings are abbreviations for the respondents' titles: R1: marketing manager 1, R2: top manager 1, R3: marketing manager 2, R4: top management 2, R5: academic 1, R6: academic 2, R7: academic 3; R8: rector, R9: IT manager.

| Demographics | Category | Number | Total |
|---|---|---|---|
| **Gender** | Male | 6 | 9 |
| | Female | 3 | |
| **Age** | 25-30 | 2 | 9 |
| | 31-35 | 2 | |
| | 36-44 | 1 | |
| | Over 45 | 4 | |
| **Education** | Undergraduate Degree | 2 | 9 |
| | Master's Degree | 3 | |
| | PhD | 4 | |
| **Current Position** | Lecturer | 3 | 9 |
| | Head of Strategy | 1 | |
| | Chairman of the board | 1 | |
| | Marketing Manager | 2 | |
| | International Office Manager | 1 | |
| | IT Manager | 1 | |
| **Affiliation** | Westminster University Tashkent | 1 | 9 |
| | London South Bank University Tashkent | 4 | |
| | Ibn Haldun University Turkey | 1 | |
| | Istanbul University Turkey | 2 | |
| | Bath University England | 1 | |
| **Years of Experience** | 2-5 years | 2 | 9 |
| | 6- 12 years | 1 | |
| | 13-20 years | 2 | |
| | More than 20 years | 4 | |

Table 5. Interview Respondents' Sample Characteristics

| Question | Category | Keywords | Answers |
|---|---|---|---|
| What is your perspective on SM use in HE? | **Overview** | Overview | R5:" Student engagement on SM is high and they take the lead in it themselves through E-WOM"<br>R5: "SM helped provide information to all interested parties" |
| How do you assess the current HE market in your country? | **Assessing the Business environment** | Idea Generation | R5:" 10 years from now E-WOM will be enough not much marketing will be needed!" |
| Which universities in your country or worldwide you follow their SM or take as a role model? | | Idea Generation | R5:" I' m not keying in on that much"<br>R6: "I do keep up with the SM of major players such as Harvard, Oxford and also the local ones" |
| Can you describe the SM platforms of your university in terms of performance? | **Overview of SM practices** | Idea Generation | R5:"We heavily rely on Instagram and the university website in our SM marketing"<br>R6:"The SM of the university is doing well, in fact it is one key component in raising awareness about the university" |
| What is your main strategy on SM (brand awareness, brand loyalty, etc.)? | | E-Brand Positioning | R6:" It seems to be brand awareness for now"<br>R5:"Attracting the maximum perspective students through the SM platforms" |

| | | | |
|---|---|---|---|
| Do you use any "online business model" on SM? | **Strategy Formulation** | E-strategy Determination | R6:" I do not think we do so"<br>R5: "Our online business model is aligned with our offline business model" |
| What do you think of "E-branding" and how does it apply to your institution? | | E-Brand Positioning | R6:" It is an essential concept which is disregarded or not known by most HEIs, our university applies it well"<br>R5:" SM was key to establish the image and vision of our university"<br>R5: "The WOM is stronger than E-branding in Uzbekistan in my opinion" |
| How do you formulate a SM strategy (any processes and models!),<br>Do you gather data on the competitors' online performance? | | E-strategy Determination<br>E-Competitive Analysis | R6:" We sometimes communicate with the marketing department and try to discuss and formulate our social media strategy"<br>R6:"We check the practices of competitors and mostly of world top universities " |
| How important is the content of your posts?<br>How important is the timing of your posts? | | Content<br>Timing | R5: "sometimes all metrics are there yet it doesn't target appropriate or interested people"<br>R6:"Timing is very crucial especially when announcing events with deadlines"<br>R6:"The type of channel matters in terms of the number of followers and level of engagement there" |

| | | | |
|---|---|---|---|
| How important is the channel of your posts?<br><br>How important is the audience of your posts? | **Strategy Implementation** | Audience<br><br>Channel | R3:" The content we display on Facebook isn't the same to what we share on Instagram because our Facebook audience is more mature and reads longer texts"<br><br>R8:"It is very important to pay attention to the timing of posting especially events related to the academic calendar" |
| How do you handle students' feedback on you SM (the positive and the negative)?<br><br>How do you handle the E-CRM on your platforms? | **Strategy Evaluation** | E-CRM<br><br>&<br><br>E-Feedback | R5: "Offline data and research are key for strategic decisions of a university"<br><br>R5:" I believe SM feedback might be not very reliable (proper targeting is needed)"<br><br>R6:" E-CRM must be studied and designed in depth"<br><br>R7:" We take in consideration the negative feedback and we try to think how to improve from that." |
| How can the university's strategy on SM channels be effectively controlled?<br><br>Do you think a feedback management system can be useful?<br><br>Does the SM analytics reports matter to the university? | **Strategy Control** | E-Feedback Management System | R5:" I am not very knowledgeable about this system, however, it might have potential"<br><br>R6:" Most academics might not accept it well however it will benefit the university enormously, if properly implemented" |

Table 6. Interview Text Analysis (Academic Perspective)

| Question | Category | Keywords | Answers |
|---|---|---|---|
| What is your perspective on SM use in HE? | **Overview** | Overview | R2: "SM is the part of the start-up strategy that builds excitement and appeal"<br>R2 "SM is just another marketing tool for the university"<br>R4: "SM is not that very important in my opinion for managing a HEI"<br>R8: "SM is an instruments before anything, and it is relatively new in Uzbekistan for all businesses because of the lack of SMM specialists"<br>R8:"Social platforms like LinkedIn made the academic articles and the academic content more reachable and widespread" |
| How do you assess the current HE market in your country? | **Assessing the Business environment** | Idea Generation | R2 "Students appreciate the atmosphere of the university and the facilities"<br>R2: "HEIs orientation was, is and will be always non-profit, and promoting towards self-development!"<br>R2: "WOM is a very strong tool for HEIs in Uzbekistan"<br>R8: "All old universities are not very active and open on SMM in contrast to the new comers" |
| Which universities in your country or worldwide you follow their SM or take as a role model? | | Idea Generation | R2:" SM can spread fake news"<br>R4:" We do not take as a role model any particular SM because every institution must have its own Identity"<br>R1" Students might follow an institution just because it's a dream to study there!" |

| | | | |
|---|---|---|---|
| | | | R8:" I follow up many SM platforms to understand their strategies US, UK so I follow how they brand their presence" |
| Can you describe the SM platforms of your university in terms of performance? | **Overview of SM practices** | Idea Generation | R8:" We have divided the marketing into internal and external. Internal is to boost the quality of communication like in intranet where it's like an internal SM for staff" |
| What is your main strategy on SM (brand awareness, brand loyalty, etc.)? | **Strategy Formulation** | E-Brand Positioning | R8:" Ours is both internal and external towards building a competitive advantage"<br>R8:" We are not formulating online strategy by a book. But if we want to systemize it we must identify who we are and where we are now (analysis of competitors). Also where we wish to be in five and ten years. Also in terms of SM metrics: posts, followers, coverage or even rating among international universities. Practically, we look at competitors and ourselves, and how stakeholders perceive us. We brainstorm and make list of items and we shortlisted the vision and mission of the university, and we plan how to make that vision a brand" |
| Do you use any "online business model" on SM? | | E-strategy Determination | R5: "Online promotions existed a decade ago and it is incorporated into our business model"<br>R8: "A problem is we did not identify yet our long, terms or vision yet but we plan to do so soon and from that the SM strategy will stem" |
| What do you think of "E-branding" and how does it apply to your institution? | | E-Brand Positioning | R7:" E-branding is important and it must be planned properly" |

| | | | |
|---|---|---|---|
| How do you formulate a SM strategy (any processes and models!), | | E-strategy Determination | R8:"I check the competitors and big names content on SM and see how to fit it to our local settings in Uzbekistan" |
| Do you gather data on the competitors' online performance? | | E-Competitive Analysis | |
| How important is the content of your posts? | **Strategy Implementation** | Content | R7:"Yes, I do have daily meetings with the marketing manager, provide her updates and insights on the next SM strategy and practices"<br><br>R8:"We systemize our posts based on the nature of the SM platform, example: Facebook for those who are 30 and above, Instagram 18-29 and snap and TikTok are for teens mainly"<br><br>R8: "We tried different approaches of posting which helped us identify main audience in each platform. On Facebook we find parents so we cater content to them. Instagram has the current students and TikTok is for the potential students. And we cater the same or different types of content to each platform"<br><br>R8:"The type of channel and matters based on the nature of its main audience "<br><br>R8:"The content of posts matters and so are changes from one platform to another. Facebook is more for lengthy read posts, Instagram is more for pictures and small reads and TikTok is for videos only"<br><br>R8:"Content makers vary students creates TikTok content and more SMM specialist deal with FB and Instagram in coordination with the academic staff sometimes" |
| How important is the timing of your posts? | | Timing | |
| How important is the channel of your posts? | | Audience | |
| How important is the audience of your posts? | | Channel | |

| | | | |
|---|---|---|---|
| How do you handle students' feedback on you SM (the positive and the negative)?<br><br>How do you handle the E-CRM on your platforms? | **Strategy Evaluation** | E-CRM<br><br>E-Feedback | R8:"Analytics are important marketing team extract it from Google analytics and present it to board meetings"<br><br>R8:"We look at the major analytics to the executive level"<br><br>R8:"During admission periods we follow up customers feedback very promptly"<br><br>R8:"We try to be quick in replying comments on SM"<br><br>R8:"We have created FAQs to facilitate the customers reply process, and it is linked to our call center in order to align the messages we deliver through online and offline customers" |
| How can the university's strategy on SM channels be effectively controlled?<br><br>Do you think a feedback management system can be useful?<br><br>Does the SM analytics reports matter to the university? | **Strategy Control** | E-Feedback Management System | R8:"For sure a feedback management system will be useful for the university"<br><br>R8:"The profiling of students and retargeting would increase the number of students" |

Table 7. Interview Text Analysis (Top Management Perspective)

| Question | Category | Keywords | Answers |
|---|---|---|---|
| What is your perspective on SM use in HE? | **Overview** | Overview | R3: "SM has become a tool for HEIs to reach anyone in a transparent way of advertising, but it can also cause organizational issues if used wrongly"<br><br>R1: "SM is the part of the start-ups strategy that builds excitement and appeal"<br><br>R1:" E-WOM is increasingly impactful through HEI SM"<br><br>R1:" SMM of HE is going towards the collaborations with bloggers and influencer and it works very good and its free promotion"<br><br>R2: "Brand ambassadors an promote us from their own platforms which is very helpful" |
| How do you assess the current HE market in your country? | **Assessing the business environment** | Idea Generation | R1 "Students appreciate the atmosphere of the university and its facilities"<br><br>R1: "E-WOM and Influencers are very strong tools for HE Marketing" |
| Which universities in your country or worldwide you follow their SM or take as a role model? | | Idea Generation | R1:" SM can spread fake news"<br><br>R2:" We certainly keep an eye on the competition but nothing particular we follow"<br><br>R3:"Since we haven't invested in our SM yet, we haven't paid thorough attention to that yet, so we just have general information" |
| Can you describe SM platforms of your university in terms of performance? | **Overview of SM practices** | Idea Generation | R1:" Students might follow an institution just because it's a dream to study there!"<br><br>R1"For our case website isn't yet very efficient, mostly Instagram is our main source of branding "<br>R1:"We use Instagram, Facebook and the website, but this is still not optimal. On TikTok and Snapchat, we have 6K follow and it's one of our main platforms for now" |

| | | | |
|---|---|---|---|
| | | | R1:" Website is not convenient for our students yet, but we are trying to teach audiences that it is the core thing and we redirect them to it" |
| What is your main strategy on SM (Brand awareness, brand loyalty, etc.)? | **Strategy Formulation** | E-Brand Positioning | R1:" Strategy is written in collaboration with the founders"<br>R1:"We aim to reach the most number of students possible" |
| Do you use any "online business model" on SM | | E-strategy Determination | R1:" No, we do not use any"<br>R3: "Yes, we want to become an international university attracting the quality over quantity" |
| What do you think of "E-branding" and how does it apply to your institution? | | E-Brand Positioning | R1" Yes, we work on emphasizing our advantages"<br>R3: "We emphasize the advantages of joining our university and our main competitive advantages"<br>R3:" "We didn't rush into SM branding until we made brand promise alignment" |
| How do you formulate a SM strategy (any processes and models!), | | E-strategy Determination | R1:"SWOT and 7Ps analysis was made before deciding on the strategy"<br>R1:"We managed to incorporate the competition with the scholarship strategy" |
| Do you gather data on the competitors' online performance? | | | R2:" No we do gather specific data, we rather gather data on their offline performance"<br>R1:" Yes, we check other universities accounts if any interesting SM practice, we also adopt it" |
| Do you see an impact of a well formulated strategy on the implementation of it? | | E-Competitive Analysis | R8: "The implementation depends on the integrity of the formulated strategy"<br>R2: "In case of a good compilation of data and accurate conceptualization the implementation phase would be facilitated" |

| | | | |
|---|---|---|---|
| How important is the content of your posts?<br><br>How important is the timing of your posts?<br><br>How important is the channel of your posts?<br><br>How important is the audience of your posts?<br><br>Do you think the strategy implementation can have an impact on strategy control in HEIs? | **Strategy Implementation** | Content<br>Timing<br>Audience<br>Channel | R1:" Students know the vision through SM and they act accordingly in the real life"<br>R1:" The type of channel matters depending on the country, telegram and Instagram are most popular in Uzbekistan"<br>R3: "All four metrics are important but the most important one is the content!"<br>R3:" Decision on the 4 metrics depends on the target audience high engagement"<br>R2: "I believe weather it has an impact or not is related to the expertise of the marketing and strategy departments and their ability to execute the strategy"<br>R8: "Indeed, the extant of the implementation can define the extant of control" |
| How do you handle students' feedback on your SM (the positive and the negative)? | | | R1: "Almost all our new enrolled students this year came through SM due to the strong marketing campaign"<br>R1:"Feedback from our students is being analyzed in depth if it was significant" |

| | | | |
|---|---|---|---|
| How do you handle the E-CRM on your platforms? | **Strategy Evaluation** | E-CRM<br>&<br>E-Feedback | R1:" Feedback is important to us"<br>R1:" Sometimes students understand wrongly our posts, and we act promptly and fix by answering online"<br>R1:" We report all comments to the management regarding technical and educational process and it is at the core of our duties"<br>R3:" The most important things about feedback is the number of a certain feedback against the total number of audience"<br>R3:" If the feedback came in form of constructive criticism, it will definitely be considered" |
| How can the University's strategy on SM channels be effectively controlled?<br>Do you think a feedback management system can be useful?<br>Does the SM analytics reports matter to the university? | **Strategy Control** | E-Feedback Management System | R1:" A bigger team is needed for better management of the branding and feedback of students as SM platforms keep diversifying and we must keep up"<br>R1:" We plan the content periodically: weekly, monthly and over a 6 months' basis"<br>R1:" We consult with academics who orient us regarding the strategy implementation and so does the top management"<br>R3: "Implementing such system to effectively manage comments will work"<br>R3: "We periodically analyze the feedback and we plan the next steps on SM accordingly" |

Table 8. Interview Text Analysis (Marketing Perspective)

| | | Top Management | Marketing Managers | Academics |
|---|---|---|---|---|
| **Strategy Formulation** | ***Idea generation*** | Not Important | Important | Poorly Informed about it |
| | ***E-brand positioning*** | Not very Important | Important | Poorly Informed about it |
| | ***E-competitive analysis*** | Important (Offline Competitor Analysis) | Somehow Important | Important |
| | ***E-strategy determination*** | Crucial | Important | Important |
| **Strategy Implementation** | ***Content*** | The Marketing scope | Important | The Marketing scope |
| | ***Audience*** | The Marketing scope | Important | The Marketing scope |
| | ***Channel*** | The Marketing scope | Important | The Marketing scope |
| | ***Timing*** | The Marketing scope | Important | The Marketing scope |
| **Strategy Evaluation** | ***E-CRM*** | Poorly Informed about it | Important | Important |
| | ***Student feedback*** | The Marketing scope | Very Important | Very Important |
| **Strategy Control** | ***E-Feedback management*** | The Marketing scope | Important | Poorly Informed about it |
| | ***SM analytics*** | The Marketing scope | Somehow Important | Poorly Informed about it |

Table 9. Recapitulative Findings of Interviews

### 3.2. Survey Data Analysis (Qualitative Findings)

#### 3.2.1. Preliminary Data Analysis

In order to ensure that data was keyed properly into the input file, a clearing and pre-processing stage is first applied following the guidelines of Anderson and Gerbing (1998). Therefore, a two stage approach was applied for data cleaning. The first stage was checking all the data keyed into the SPSS file, and correcting the recognized errors. The second stage was conducting a frequency test using SPSS software. In order to ensure that the values are within the ranges and referring to the appropriate questionnaires. According to Sekaran (2005), if the unaccomplished response in a questionnaire exceeds 25% missing responses, the particular questionnaire must be eliminated from the analysis. The same author suggested that geographic and personal data such as gender, age or nationality could be retained for demographic analysis purposes since it does not affect the hypotheses testing process. Based on the guidelines by Sekaran (2005), the researcher deleted 10 incomplete questionnaires and excluded 04 multivariate outliers from the data set. Before proceeding with the statistical analysis of test the structural model and the research hypotheses, preliminary data analysis and descriptive analysis were conducted in order to identify the missing information and check whether the outliers and normality conditions were met.

#### 3.2.2. Missing Data

Data is considered as missing when a respondent does not answer one or more questions in a questionnaire. When using SEM, Byrne (2013) recommended that the estimation procedures with the Maximum Likelihood option (ML) will not be possible unless the missing data problem is addressed. Hair and Anderson (2010) stated that in the case of missing data researchers should start by checking the data for any systematic errors. The current study employed SPSS software to test the indicators for frequency distribution and results showed that 0.8% of the questionnaires were missing values greater than 5% which represents a very limited percentage of data. Therefore, the issue of missing data was not considered serious and the ten questionnaires with missing data were excluded for better accuracy of results and for a more robust statistical analyses.

### 3.2.3. Outliers

According to Pallant (2007), outliers are the values outside the range of the other scores in the data set. In the current study, univariate outliers were assessed by screening values of univariate Skewness and univariate Kurtosis. In particular, if the Skewness and the Kurtosis are respectively greater than 3 and 10 in value, the data set is free of outliers (Kline, 2010). On the other hand, multivariates scenarios were examined using Mahalanobis $D^2$ test with thresholds of $p1 < 0.005$ and $p2 < 0.05$ (Kline, 2016). According to the Skewness and Kurtosis tests results, the data was free from univariate outliers. However, the Mhanalanobis $D^2$ test showed the existence of multivariate outliers in four cases. Two methods have been proposed in the literature to address the outliers issue. The first method is to delete the outliers or to transform the data which will result in data loss (Kline, 2016), while the second approach is to adjust the data and distribute it normally which will lead to some deviation in the data and will affect the quality of the findings (Hair and Anderson, 2006). The first solution has been opted for in this study and the four extreme outliers were deleted.

### 3.2.4. Normality

The normality of the data usually precedes any data analysis measures (Byrne, 2013). Hair and Anderson (2006) suggested that the values of Skewness and Kurtosis be analyzed for extreme values. In particular, Skewness >3.0 and Kurtosis >10.0 indicate non normality. Kline (2016), asserted that for a normally distributed data the critical ratio (CR) of Skewness and Kurtosis must vary between 2.58 (for a 1% level of significance) and 1.96 (for a 5% level of significance). In this study, the normality of the data was tested following the criteria mentioned above. The results of normality assessment showed that Skewness and Kurtosis values for all variables are below the cut-off values of 3.0 and 10.0 respectively. Therefore, we conclude that the data set is clean from missing values, problems in non-normality and outliers.

### 3.2.5. Descriptive Analysis

The percentage of participation and demographic characteristics of the respondents reflects their views and common aspects regarding the construct items. This section analyses the result of the research related to the response rate and demographics.

### 3.2.6. Response Rate

One hundred and fifty-six surveys were shared online among a target audience of: marketing managers, academics, IT managers and top managers at HEIs. All questionnaires were answered from which, 142 were utilized in this study since four extreme outliers were deleted and ten others were missing data. This resulted in a response rate of 91% which is considered an excellent rate. This rate was expected since the respondents were targeted and identified as decision makers related to the topic of the study. Furthermore, the clear and concise explanation provided to each respondent about the purpose of the questionnaire, how long it will take them to finish it and how the information will be used has definitely lead to this high response rate.

### 3.2.7. Demographic Characteristics

Table 10. depicts the demographic profile of the respondents including their age, gender, occupation, and education level.

### 3.2.8. Respondents' Educational Background

The educational background analysis for the 142 respondents is depicted by Table 11.

### 3.2.9. Respondents' Experience Level

The number of years of experience for the 142 respondents is summarized in Figure 4.

| Attributes | Category | Number |
|---|---|---|
| **Gender** | Male | 89 |
| | Female | 53 |
| | Missing | 0 |
| **Age** | 22-28 | 4 |
| | 29-34 | 80 |
| | 35-43 | 13 |
| | 44-50 | 22 |
| | 51-59 | 15 |
| | Over 60 | 8 |
| | Missing | 0 |
| **Education** | Bachelor degree | 16 |
| | Master degree | 99 |
| | PhD Degree | 27 |
| | Missing | 0 |
| **Occupation** | Marketing Manager | 9 |
| | Academic | 114 |
| | Top Management | 13 |
| | Others | 6 |
| | Missing | 0 |

Table 10. The Demographic Profile of the Respondents

| Educational Background | Frequency | (%) |
|---|---|---|
| Art and Literature | 12 | 8.4% |
| Social Sciences | 40 | 28.16% |
| Economics | 31 | 37.32% |
| Business and Management | 53 | 21.83% |
| IT | 6 | 4.22% |
| Total | 142 | 100% |

Table 11. Respondents' Educational Background

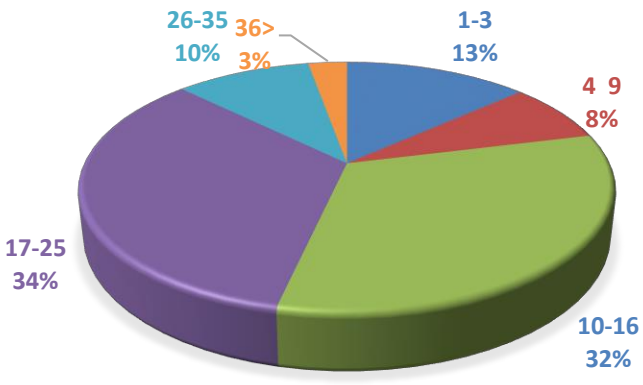



Figure 5: Respondents' Years of Experience

### 3.2.10. Descriptive Analysis of the Survey Components

Descriptive analysis was conducted on all components of the questionnaire namely; strategy formulation, strategy implementation, strategy evaluation and strategy control. The descriptive analysis comprises the standard deviation, the mean and the Skewness and Kurtosis values of these constructs. Further, all the items in the questionnaire were measured using a five-point Likert-scale from 1= Strongly Disagree to 5=Strongly Agree.

Strategy formulation was measured using thirteen items. Table12. depicts the descriptive statistics for the strategy formulation items explored. The results showed that all items had mean values between 3.75 and 3.94 with an average mean of 3.83 (standard deviation =1.5). These findings suggested that respondents' strategy formulation impact on the overall SM strategy process was not negligible. The highest mean in SM items was for the item "Universities are showcasing their SM platforms well" with a mean value of 3.93. However, the lowest mean was obtained for the item "If a university seems International on SM I may consider studying\working there." with a value of 3.07.

Table 13. summarizes the descriptive statistics for the eight items used to measure the strategy implementation impact. The results show that all items for strategy implementation had an average mean of 3.89 (standard deviation =1.08). These findings

showed that the impact of strategy implementation on the overall SM strategy process was significant. The highest mean value in website items was for the

| Code | Item | Mean | S.D | Skew | Kurt |
|---|---|---|---|---|---|
| SF1 | Universities are showcasing their SM platforms well. | 3.93 | 1.148 | -.881 | .135 |
| SF 2 | Universities communicates their core values online. | 3.77 | 1.179 | -.901 | .133 |
| SF 3 | Online branding gives a competitive advantage over other universities. | 3.70 | 1.131 | -.999 | .502 |
| SF 4 | SM content may attract students from abroad. | 3.75 | 1.124 | -.958 | .510 |
| SF 5 | Online logos, images, and symbols are associated with the university in reality. | 3.92 | 1.209 | -1.006 | .226 |
| SF 6 | Not many departments could be involved in designing the strategy of a university. | 3.81 | 1.157 | -.963 | .378 |
| SF 7 | The promised programs offered online must align with the mission and vision of the university. | 3.91 | 1.176 | -.162 | .678 |
| SF 8 | If a university seems prestigious on SM I may consider studying\working there. | 3.33 | 1.179 | -.871 | .155 |
| SF 9 | If a university seems International on SM I may consider studying\working there. | 3.07 | 1.101 | -.931 | .103 |
| SF 10 | If a university offer a good social life for students I may consider studying\working there. | 3.10 | 1.184 | -.909 | .402 |
| SF 11 | Programs, fees, location, scholarships, etc. are preferably to be found on the SM of the university. | 3.45 | 1.299 | -.957 | .512 |
| SF 12 | Online competitors are not a big influence in the design of university strategy. | 3.52 | 1.189 | -1.106 | .236 |
| SF 13 | The online and offline marketing objectives of the university may not be the same. | 3.85 | 1.131 | -.943 | .398 |

*Scale from 1= Strongly Disagree to 5= Strongly Agree.

Table 12. Descriptive Statistics (Strategy Formulation)

item “SM platforms do not illustrate well the strategy of a university” with a value of (3.99). However, the lowest mean value was obtained for the item “SM platforms

deliver updates to the audience of the university" with a value of (3.77).

| Code | Item | Mean | S.D | Skew | Kurt |
|---|---|---|---|---|---|
| SI 1 | SM platforms do not illustrate well the strategy of a university. | 3.99 | 1.06 | -.94 | .52 |
| SI 2 | SM platforms have a potential to Illustrate the strategy of a university. | 3.81 | 1.15 | -1.07 | .59 |
| SI 3 | SM platforms help deliver updates to the audience of the university. | 3.77 | 1.08 | -1.04 | .76 |
| SI 4 | Posts, videos, and other sorts of interactive content can be a way to explain the strategy of the university. | 3.83 | 1.11 | -.98 | .60 |
| SI 5 | All types of content can be posted on any SM channel. | 3.94 | 1.14 | -1.12 | .75 |
| SI 6 | The content posted by universities can reach the wrong audience. | 3.95 | 1.11 | -1.20 | 1.06 |
| SI 7 | Choice of timing is not very important when sharing updates through SM platforms. | 3.97 | 1.17 | -1.24 | .85 |
| SI8 | The steps of implementing a university strategy will determine the process of evaluating it. | 3.91 | 1.07 | -1.76 | .80 |

*Scale from 1= Strongly Disagree to 5= Strongly Agree.

Table 13. Descriptive Statistics (Strategy Implementation)

Table 14. shows that among the seven items of strategy evaluation, four items had their mean values above 3.5 (average mean = 3.62, standard deviation =1.17). The highest mean value was obtained for the item "The SM feedback can useful for the top management" with a value of 3.72. The lowest mean value, on the other hand, was for the item "The feedback of users on SM is not very important" with the mean value of 3.55.

| Code | Item | Mean | S.D | Skew | Kurt |
|---|---|---|---|---|---|
| SE1 | The outcomes of the university strategy can be compared with initial goals. | 3.63 | 1.26 | -.841 | -.233 |
| SE2 | The feedback of users on SM is not very important . | 3.55 | 1.14 | -.872 | .011 |
| SE3 | User feedback can help reflect on the overall performance of the university. | 3.67 | 1.17 | -.907 | .123 |
| SE4 | The SM feedback can be useful for the top management | 3.72 | 1.23 | -.874 | -.082 |
| SE5 | The feedback should not be disclosed to other departments | 3.66 | 1.17 | -.885 | .091 |
| SE6 | Posting replies to comments on SM implies a positive brand perception from the audience. | 3.68 | 1.22 | -.804 | -.082 |
| SE7 | Evaluating a university strategy will help the process of controlling it. | 3.53 | 1.27 | -.835 | .091 |

*Scale from 1= Strongly Disagree to 5= Strongly Agree.

Table 14. Descriptive Statistics (Strategy Evaluation)

Table 15. summarizes the findings related to strategy control process (7 items). The average mean and deviation for the five items used were respectively: 3.69 and 1.81. Thus, these results indicate that strategy control significantly affects the new strategy formulation process. The descriptive analysis results of strategy control construct are shown on Table 15. The mean values of perceived value items were greater than the midpoint (average mean = 4.78, standard deviation = 1.37). This implies that respondents tend to agree more with that item.

| Code | Item | Mean | S.D | Skew | Kurt |
|---|---|---|---|---|---|
| SC 1 | The strategy of the university can be controlled. | 3.64 | 1.20 | -.899 | .013 |
| SC 2 | A system of SM feedback management can be used by the university. | 3.69 | 1.26 | -.902 | -.139 |
| SC 3 | Managing the SM feedback strategy requires a team. | 3.70 | 1.26 | -.899 | -.146 |
| SC 4 | Managing the SM feedback strategy does not require a department. | 3.69 | 1.22 | -.1.036 | .205 |
| SC 5 | Knowledge of analytics can help in managing SM feedback. | 3.78 | 1.27 | -.935 | -.104 |
| SC 6 | A university's SM platforms constant monitoring may improve its performance. | 3.69 | 1.26 | -.1.036 | .205 |
| SC7 | A well-established feedback system must be Omni-channel. | 3.78 | 1.28 | -.890 | -.106 |

*Scale from 1= Strongly Disagree to 5= Strongly Agree.

Table 15. Descriptive Statistics (Strategy Control)

### 3.2.11. Exploratory Factor Analysis

According to Pallant (2007), EFA is used to explore the relationship between a particular series of variables investigated in the research. Before proceeding to EFA, the Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) test are required. As shown in Table 16., the KMO test resulted in the value of (0.801) meaning that the KMO test was significant since the cut-off point is (0.6). This result means that the data is suitable for the principal component analysis. In addition, the Bartlett's sphericity test was significant ($p < 0.001$) implying that there is a sufficient correlation between variables. These satisfying results indicate the suitability of the data for conducting an EFA.

Malhotra and Birks (2017) suggested that the Exploratory Factor Analysis should be conducted using the component extraction method along with the "Varimax rotation method". Items with factors loading greater than (0.5) and eigenvalues greater than (1.0) were retained from the constructs and no items were deleted. Therefore, the EFA resulted into four factors accounting for some (71 %) from the variance in the measured

variables, namely strategy formulation, strategy implementation, strategy evaluation, and strategy control. Further, the EFA findings showed that all the items proposed for each construct were extracted. It is also important to note that all of the factor loadings were greater than the cut-off value of (0.5). Table 18. displays the EFA results.

| | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.801 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 9605.333 |
| | Df | 496 |
| | Sig. | .000 |

Table 16. KMO and Bartlett's Test

### 3.2.12. Assessment of Reliability

This study measured reliability using cronbach`s alpha as suggested by Hair and Anderson (2006). Table 17. shows that the cronbach`s alpha of all factors were greater than the cut-off level of 0.7 for all constructs. Therefore, the data is deemed reliable.

| FACTOR | No. CASES | No. ITEMS | CRONBACH'S |
|---|---|---|---|
| Strategy Formulation | 142 | 13 | 0.867 |
| Strategy Implementation | 142 | 8 | 0.704 |
| Strategy Evaluation | 142 | 7 | 0.803 |
| Strategy Control | 142 | 7 | 0.901 |

Table 17. Reliability Test

| Items | SF | SI | SE | SC |
|---|---|---|---|---|
| SF1 | 0.609 | | | |
| SF2 | 0.801 | | | |
| SF3 | 0.878 | | | |
| SF4 | 0.777 | | | |
| SF5 | 0.869 | | | |
| SF6 | 0.664 | | | |
| SF7 | 0.586 | | | |
| SF8 | 0.804 | | | |
| SF9 | 0.876 | | | |
| SF10 | 0.573 | | | |
| SF11 | 0.968 | | | |
| SF12 | 0.741 | | | |
| SF13 | 0.570 | | | |
| SI1 | | 0.820 | | |
| SI2 | | 0.788 | | |
| SI3 | | 0.810 | | |
| SI4 | | 0.608 | | |
| SI5 | | 0.684 | | |
| SI6 | | 0.801 | | |
| SI7 | | 0.833 | | |
| SI8 | | 0.911 | | |
| SE1 | | | | 0.915 |
| SE2 | | | | 0.804 |
| SE3 | | | | 0.907 |
| SE4 | | | | 0.630 |
| SE5 | | | | 0.705 |
| SE6 | | | | 0.801 |
| SE7 | | | | 0.624 |
| SC1 | | | | 0.908 |
| SC2 | | | 0.903 | |
| SC3 | | | 0.875 | |
| SC4 | | | 0.840 | |
| SC5 | | | 0.703 | |
| SC6 | | | 0.903 | |
| SC7 | | | 0.875 | |
| | | | 0.840 | |
| Initial eigenvalues | 5.634 | 5.446 | 4.394 | 11.742 |
| % of variance | 18.174 | 17.569 | 50.137 | **71.002** |
| Cumulative% | 18.174 | 35.743 | | |

Table 18. Exploratory Factor Analysis Results

### 3.2.13. Confirmatory Factor Analysis

The present study followed a two stage SEM analysis, which involves testing and validating the full structural research model including all the constructs used in the current study (strategy formulation, strategy implementation, strategy evaluation and strategy control). The subsequent Table 19. presents the results of testing:

| CONSTRUCT | MODEL | $\chi^2$ | df | $\chi^2$/df | CFI | GFI | NFI | RMSEA |
|---|---|---|---|---|---|---|---|---|
| SF | revised | 34.409 | 9 | 3.822 | 0.921 | 0.986 | 0.916 | 0.080 |
| SI | default | 24.269 | 5 | 4.853 | 0.964 | 0.944 | 0.969 | 0.025 |
| SE | default | 31.324 | 9 | 2.369 | 0.939 | 0.902 | 0.933 | 0.017 |
| SC | default | 21.336 | 7 | 3.048 | 0.906 | 0.999 | 0.874 | 0.021 |

SF: Strategy Formulation, SI: Strategy Implementation, SE: Strategy Evaluation, Strategy Control

Table 19. Summary of CFA Results

### 3.2.14. Measurement of the Full Structural Model

The EFA results retained all 35 items. For each of the latent constructs strategy evaluation, and strategy control seven items were retained. While thirteen items were kept for the strategy formulation construct and finally eight items for strategy implementation. At first, the CFA results showed that the model did not fit the data. As the Chi-square ($\chi^2$/df) of 1.99 was less than the cut-off value of 5.0, CFI above the cut-off value of 0.9 (CFI= 0.969), RMSEA= 0.049 (above the cut-off value of 0.05) and NFI was above the threshold of 0.9 (NFI= 0.945). However, the requirement of GFI was not satisfied, as GFI=0. 801.Byrne (2013) suggested that researchers can modify and adjust the model and improve its fitness based on the value of the standardized residuals, insignificant paths and substantial value of the Modification Index (MI). In case the value of a residual is greater than 2.58, it is an indicator of specification error in the model. Therefore, the modification indices of error covariance for the items SF2 and SF3 was 28.712, and for the items SI1 and SI4 was 25.538. Correlating these errors resulted in improving the fit indices.

### 3.2.15. Assessment of Validity

In terms of validity, the present study assessed the validity of the constructs using Composite Reliability (CR), Average Variance Extracted (AVE), Maximum shared Squared Variance (MSV) and Average Shared Squared Variance (ASV), Maximum Shared Squared Variance (MSV), and Average Shared Squared Variance (ASV). The construct will have sufficient convergent validity if the AVE is greater than 0.5, CR is greater than AVE, and CR is greater than 0.7 (Kline, 2016). Hair and Anderson (2010) suggested these thresholds as a rule to establish discriminant validity. This requires MSV and ASV to be less than AVE. Therefore, the findings of the validity test presented in Table 20. indicate that the criteria of convergent validity are met as all AVE are greater than 0.5. For the convergent and discriminant validity the rule of thumb by Hair and Anderson (2010) was also met as CR >AVE and AVE > 0.5 (convergent validity) and MSV >AVE ASV >AVE (discriminant validity) both rules were satisfied for validity testing.

| FACTORS | CR | AVE | MSV | ASV |
|---|---|---|---|---|
| Strategy Formulation | 0.703 | 0.603 | 0.004 | 0.015 |
| Strategy Implementation | 0.970 | 0.722 | 0.079 | 0.087 |
| Strategy Evaluation | 0.821 | 0.660 | 0.013 | 0.002 |
| Strategy Control | 0.936 | 0.820 | 0.009 | 0.003 |

CR: Composite Reliability.
AVE: Average Variance Extracted (MSV).
MSV: Maximum Shared Squared Variance**.**

Table 20. Validity Test

### 3.2.16. Testing the Structural Research Model

The structural research model was tested to examine the causal paths reflecting all hypotheses. Figure 5. depicts the results of testing the hypothesized structural model. It seems that not all of the fit indices of the model were within the satisfactory levels. While, the normed Chi-square was 2.005 well below the cut-off value of 5.0, and RMSEA was 0.054 which is also less than the cut-off 0.08. The CFI and TLI requirement were satisfied. The CFI value was 0.971 and the TLI was 0.967 which are

considered above the cut–off value of 0.90 indicating that the hypothesized model fit well with the data. In light of this, it is not necessary to revise the model.

| | Estimate | S.E. | C.R. | P |
|---|---|---|---|---|
| Strategy Formulation- Strategy Implementation | 0.544 | 0.053 | 5.549 | *** |
| Strategy Implementation- Strategy Evaluation | 0.409 | 0.071 | 6.761 | *** |
| Strategy Evaluation- Strategy Control | 0.427 | 0.086 | 5.599 | *** |
| Strategy Control - Strategy Formulation | 0.268 | 0.054 | 4.974 | *** |

Note: Std. Reg. Weight: Standardized regression weight
S.E.: Standard error of regression weight
C.R.: Critical ratio of regression weight
P: Level of significance of regression weight, ***Significant at $p < 0.01$

Table 21. Estimates of the Hypothesized Model

### 3.2.17. Thresholds of the SEM analysis fit indices:

The table below is a reference and recapitulation of the values of the model fit indices vs. their thresholds:

| Fit indices | Obtained | Suggested |
|---|---|---|
| Chi square ($\chi 2$/df) | 1.99 | ≤5 |
| RMSEA | 0.054 | ≤0.08 |
| CFI | 0.971 | ≥0.09 |
| NFI | 0.945 | ≥ 0.09 |
| GFI | 0.923 | ≥ 0.09 |
| TLI | 0.769 | ≥ 0.09 |

Table 22. Thresholds of the SEM analysis fit indices

### 3.2.18. Testing Mediation Effects in The Structural Research Model

Many SEM packages, such as AMOS, allow to conduct tests of the indirect effects (mediation effect). And when it comes to the current analysis, the paths in the structural model were tested through the test of the indirect effects (Hayes,2017). In addition, the SEM analysis approach provided model fit output that delivered information about consistency of the hypothesized mediational model to the data earlier. Although,

measurement error is a potential concern in mediation testing because of attenuation of relationships. In this analysis, the issue was addressed by removing the measurement error from the estimation of the relationships among the latent variables (Hayes,2017). Results of the mediation test are displayed in the table below:

| Relationship | Unstand Estimate | Lower | Upper | P value | Standardized Estimate |
|---|---|---|---|---|---|
| Form<--- Implement <--- Eval | 0.008 | 0.004 | 0.014 | 0.001 | 0.026*** |
| Implement <---Eval<---Control | 0.038 | 0.025 | 0.051 | 0.001 | 0.0129*** |
| Evaluation <-- Control<-- form | 0.029 | 0.034 | 0.036 | 0.001 | 0.053*** |

Table 23. Standardized Regression Weights.

**$\chi^2$ =396.321, df =199, RMSEA =0.049, NFI =0.945, GFI =0.923, CFI = 0.971**

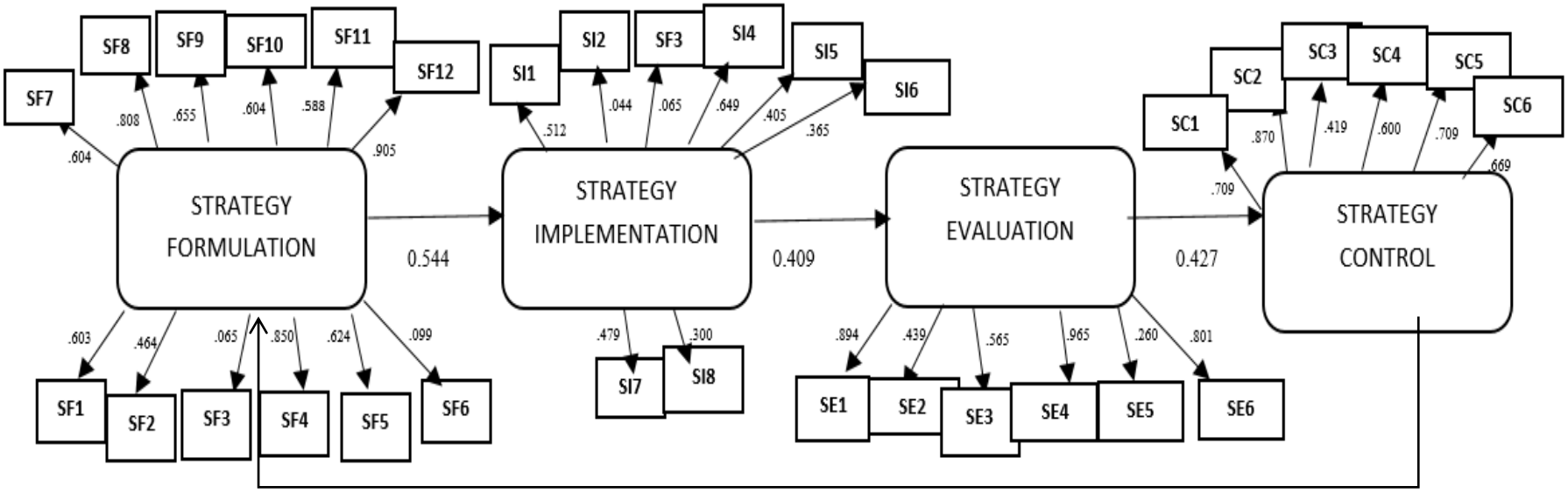



Figure 6. Modified Structural Model

### 3.3. Social Media Data Mining

The last phase of the data analysis in this research undertakes the research model's "E-branding" phase. It particularly seeks to investigate the following research sub-hypotheses:

***H2a: SM platforms' content impacts the effectiveness of the HEIs E-marketing process.***

***H2b: SM platforms' audience impacts the effectiveness of the HEIs E-marketing process.***

***H2c: SM platforms' timing impacts the effectiveness of the HEIs E-marketing process.***

***H2d: SM platforms' channel type impacts the effectiveness of the HEIs E-marketing process.***

The hypotheses check will be performed in two stages. First, raw data will be extracted from the 2021 top 10 HEIs' SM platforms through a "Text Mining" method. Later, a Pearson correlation test will be performed in order to check the validity of the latter hypotheses.

#### 3.3.1. Social Media Text Mining Process

According to Young et al. (2018) text mining is the term used to describe either a single process or a collection of processes in which software tools actively engage in the discovery of new or previously unknown information by automatically extracting information from different written [or text] sources. Chen (2014) further explains that the latter process is used in various business and science spheres in aim to provide business intelligence related output that helps organizations analyze customers and competitors and thus make better decisions.

In the HE field, SM text mining is used to analyze a set of educational trends such as student's interest in specific field, students' performance and students' online engagement level (Chen, 2014). Given that HE is an industry, text mining also provides information on ways to improve customer satisfaction and gain competitive advantages (Amanatidis et al., 2021). The process of text mining in this research was a mix of

Information Retrieval (IR) which enables the retrieval of raw content from SM posts, and Natural Language Processing (NLP) text mining methods which relates to the automatic processing and analysis of unstructured textual information (Chen, 2014). Using PYTHON, the researcher has extracted data on: the number of likes, number of comments, number of views (in case of a video), the captions of posts, the hashtags, the timing, the date and the short URL code of all the posts on the Instagram profiles of the worlds' top 10 most engaging HEIs' SM profiles. During the time period between January, 1st 2020, and June, 15th 2021. The list of universities with the engagement rate is displayed in the table below (Source: rivaliq.com, 2021). In addition to the code used to extract the data into a CVS. Zip file (Figure. 6).

| Rank | University | Total Engagement | Engagement Rate |
|---|---|---|---|
| **1** | James Madison University | 750669 | 8.99% |
| **2** | Virginia Tech | 962418 | 6.85% |
| **3** | Brigham Young University | 623693 | 8.13% |
| **4** | University of Iowa | 1096715 | 6.05% |
| **5** | University of Vermont | 684656 | 6.86% |
| **6** | U.S.Naval Academy | 2195721 | 5.40% |
| **7** | Holy Cross | 350208 | 9.17% |
| **8** | University of Pittsburgh | 450352 | 7.36% |
| **9** | University of Massachusetts Amherst | 755857 | 6.12% |
| **10** | Binghamton | 607175 | 6.50% |

Table 24. Top HEIs' Profiles on Instagram (June 2021).

#### 3.3.1.1. Text Acquisition

After running the extraction code, a CVS. file of raw data on the number of likes, number of comments, number of views (in case of a video), the captions of posts, the hashtags, the timing, the date, and the short URL code, profiled by university name was available. The average number of posts per university in the (January, 1st 2020, until June,15th 2021) time-lapse was 2000 Instagram posts.

#### 3.3.1.2. Data Cleaning and Representing

After acquiring the raw data through IR and NPL (Amanatidis et al., 2021), and in order for data the sets to be ready for the next step of the analysis, clearing the

```
# This script only depends on the instaloader library. The data
# extraction was done with version 4.7.2 and Python 3.8.
import instaloader
import csv

# Start instaloader manager.
L = instaloader.Instaloader()

# Login: replace your identifiers here.
L.login('YOUR_LOGIN', 'YOUR_PASSWORD')

# List of universities to fetch data for.
universities = [
  "jamesmadisonuniversity",
  "virginia.tech",
  "brighamyounguniversity",
  "uiowa",
  "universityofvermont",
  "usnavalacademy",
  "pittofficial",
  "binghamtonu",
  "oxford_uni",
  "harvard",
  "cambridgeuniversity",
]
for university in universities:
  print(f'Processing {university}...')

  # Load profile and fetch posts of the university.
  profile = instaloader.Profile.from_username(L.context, university)
  posts = profile.get_posts()

  # Metadata is going to be saved at university_name.csv.
  with open(f'{university}.csv', 'w', newline='') as csvfile:
    # Columns that will be written to CSV. Must match the fields in the
    # 'meta' dictionary below.
    fieldnames = [
      "shortcode",
      "date",
      "caption",
      "hashtags",
      "likes",
      "comments",
    ]
    writer = csv.DictWriter(csvfile, fieldnames=fieldnames)
    writer.writeheader()
    # For each post, write the metadata in a new CSV row.
    for post in posts:
      meta = {
        "shortcode": post.shortcode,
        "date": post.date_utc,
        "caption": post.caption,
        "hashtags": post.caption_hashtags,

        "likes": post.likes,
        "comments": post.comments,
      }
      writer.writerow(meta)
```

Figure 7. PYTHON Code to Extract Instagram Data.

noise from the data is a must (Siddiqui, 2016). Therefore, all the unwanted symbols, abbreviations, spelling mistakes, emoticons and tags were deleted from the data sets. In addition, the dates, hashtags, captions, and timing values and text were coded into a numeric form in order to effectuate the Pearson correlation analysis on the R software. Samples of the computed values include:

| Content | | Channel | | Timing | | Audience (Hashtag) | |
|---|---|---|---|---|---|---|---|
| 1 | Academic | 1 | Appropriate | 1 | Appropriate | 1 | Hashtaged |
| 2 | Marketing | | | | | | |
| 3 | Student-based | 2 | Not appropriate | 2 | Not appropriate | 2 | Not Hashtaged |

Table 25. Coding of the extracted Instagram Data.

### 3.3.2. Partial Correlation

According Krishnan (2020), partial correlation occurs when one or more variables are kept constant and the relationship is studied between others. It measures the strength of a relationship between two variables, while controlling for the effect of one or more other variables (Krishnan, 2020). The current research uses the SM text mining data in order to test the sub-hypotheses through running a partial correlation on each sub hypothesis.

***H2a: Social media platforms' content impacts the effectiveness of the HEIs e-marketing process***

Below are the results of partial correlation test. Which was run on SPSS to measure the strength of correlation between likes and comments while controlling for the type of content displayed on the Instagram posts of HEIs. Assuming that the number of likes and the number of comments are independent variables. Whilst, the type of content is the dependent variable. The analysis started by positing two hypotheses:

*H2a0: SM platforms' content does not impact the effectiveness of the HEIs e-marketing process*

*H2a1: SM platforms' content does impact the effectiveness of the HEIs e-marketing process.*

A new syntax file was later created in which the following code was used to test the partial correlation in the latter hypotheses:

```
NONPAR CORR Likes Comments ContentType
/MISSING = LISTWISE
/MATRIX OUT(*).
RECODE rowtype_ ('RHO'='CORR') .
PARTIAL CORR
/significance = twotail
/MISSING = LISTWISE
/MATRIX IN(*).
```

Figure 8. Partial Correlation Code for SM Platforms' Content.

It is important to mention here that the test was run according to the following steps: adding the code into a syntax sheet, running the Spearman correlation, recoding to change into a Pearson correlation coefficient, and finally, entering the variables to correlate partially whilst specifying the control variable. The results of the partial correlation matrix obtained can be seen in the table below:

On a sample size of 1500 posts. A partial correlation was run to determine the relationship between "likes" and "comments" whilst controlling for "type of content" within a significance level of $p < 0.005$. Results of the test indicate that there was a significant positive partial correlation between likes (0-15098) and comments (0-10843), while controlling for content type (academic, marketing, students-based), which was statistically significant, $r(89) = 0.683$, $N = 1500$, $p = .005$.

The Null hypothesis H2a0 is therefore rejected and the H2a1 hypothesis is accepted.

| Control Variables | | | Likes | Comments |
|---|---|---|---|---|
| Content Type | Likes | Correlation | 1.000 | .683 |
| | | Significance | . | .001 |
| | | df | 0 | 89 |
| | Comments | Correlation | .683 | 1.000 |
| | | Significance | .001 | . |
| | | df | 89 | 0 |

Table 26. Partial Correlation results for SM Platform Content.

***H2b: Social media platforms' audience impacts the effectiveness of the HEIs e-marketing process***

Below are the results of the partial correlation test. Which was run on SPSS to measure the strength of correlation between "likes" and "comments" while controlling for the proper targeting on the Instagram posts of the top HEIs through "hashtags". Assuming that the number of likes and the number of comments are independent variables, whilst, the "hashtag" is the dependent variable. All following the data coding mentioned earlier. The analysis started by positing two hypotheses:

*H2b0: SM platforms' audience does not impact the effectiveness of the HEIs E-marketing process*

*H2b1: SM platforms' audience does impact the effectiveness of the HEIs E-marketing process.*

On SPSS, a new syntax file was created, in which the following code was used to test the partial correlation in the latter hypotheses:

```
NONPAR CORR Likes Comments Hashtag
/MISSING = LISTWISE
/MATRIX OUT(*).
RECODE rowtype_ ('RHO'='CORR') .
PARTIAL CORR
/significance = twotail
/MISSING = LISTWISE
/MATRIX IN(*).
```

Figure 9. Partial Correlation Code for SM Platforms' Audience.

It is important to mention here that the test was run according to the following steps: Adding the code into a syntax sheet, running the Spearman correlation, recoding to switch into a Pearson correlation coefficient, and finally, entering the variables to correlate partially whilst specifying the control variable. The results of the partial Correlation Matrix obtained can be seen in the table below:

| *Control Variables* | | | *Likes* | *Comments* |
|---|---|---|---|---|
| *Hashtag* | Likes | Correlation | 1.000 | .363 |
| | | Significance | . | .102 |
| | | df | 0 | 78 |
| | Comments | Correlation | .363 | 1.000 |
| | | Significance | .102 | . |
| | | df | 78 | 0 |

Table 27. Partial Correlation Results for SM Platform Audience.

On a sample size of 1530 posts, a partial correlation was run to determine the relationship between "likes" and "comments" whilst controlling for "hashtag" within a significance level of $p < 0.005$. Results of the test indicate that the correlation between the hashtag (0-9800) and the comments (0-13404) has the value of 0.363 significance value of 0.102 and has a 78 degree of freedom. This correlation is not significant given it significance value (above 0.005), $r(78) = 0.363$, $N = 1530$, $p = .102$. The Null hypothesis H2b0 is therefore accepted and the H2b1 hypothesis is rejected

***H2c: Social media platforms' timing impacts the effectiveness of the HEIs E-marketing process***

Below are the results of Partial correlation test. Which was run on SPSS to test the strength of correlation between likes and comments while controlling for the timing of the posts displayed on the Instagram pages of the top HEIs. Assuming that the number of likes and the number of comments are independent variables, whilst, the timing is the dependent variable. The analysis started by positing two hypotheses:

*H2c0: SM platforms' Timing does not impact the effectiveness of the HEIs E-marketing process*

*H2c1: SM platforms' Timing does impact the effectiveness of the HEIs E-marketing process.*

A new syntax file was created in which the following code was used to test the partial correlation in the latter hypotheses:

```
NONPAR CORR Likes Comments Timing
/MISSING = LISTWISE
/MATRIX OUT(*).
RECODE rowtype_ ('RHO'='CORR') .
PARTIAL CORR
/significance = twotail
/MISSING = LISTWISE
/MATRIX IN(*).
```

Figure 10. Partial Correlation Code for SM Platforms' Timing.

The test was run according to the following steps: adding the code into a syntax sheet, running the Spearman Correlation, Recoding to change into a Pearson correlation coefficient, and finally, entering the variables to correlate partially whilst specifying the control variable. The results of the partial correlation matrix obtained can be seen in the table below:

| *Control Variables* | | | *Likes* | *Comments* |
|---|---|---|---|---|
| *Timing* | Likes | Correlation | 1.000 | .866 |
| | | Significance | . | .002 |
| | | df | 0 | 105 |
| | Comments | Correlation | .866 | 1.000 |
| | | Significance | .002 | . |
| | | df | 105 | 0 |

Table 28. Partial Correlation Results for SM Platform Timing.

On a sample size of 1320 posts, a partial correlation was run to determine the relationship between "likes" and "comments" whilst controlling for "timing" within a significance level of $p < 0.005$. Results of the test indicate that there was a significant strong partial correlation between likes (0-13309) and comments (0-12009), while controlling for timing (appropriate, not appropriate), which was statistically significant, $r(105) = 0.866$, $N = 1320$, $p = .002$.The Null hypothesis H2c0 is therefore rejected and the H2c1 hypothesis is accepted.

***H2d: Social media platforms' channel type impacts the effectiveness of the HEIs E-marketing process***

Below are the results of the partial correlation test which was run through SPSS in order to measure the strength of correlation between likes and comments while

controlling for the type of channel for the posts of the top HEIs in 2021. It is worth to mention here that the posts of the dataset were extracted, examined, and categorized by the suitability of their content to the Instagram platform. Assuming that posts on Instagram are better to be concise, straight forward and focus on delivering the main message through an image, video or a link. In this test the number of likes and The number of comments are deemed independent variables, whilst, the type of content is the dependent variable. The analysis started by positing two hypotheses:

*H2d0: SM platforms'* channel type *does not impact the effectiveness of the HEIs E-marketing process*

*H2d1: SM platforms'* channel type *does impact the effectiveness of the HEIs E-marketing process.*

A new syntax file was created in which the following code was used to test the partial correlation in the latter hypotheses:

```
NONPAR CORR Likes Comments ChannelType
/MISSING = LISTWISE
/MATRIX OUT(*).
RECODE rowtype_ ('RHO'='CORR') .
PARTIAL CORR
/significance = twotail
/MISSING = LISTWISE
/MATRIX IN(*).
```

Figure 11. Partial Correlation Code for SM Platforms Type.

It is important to mention here that the test was run according to the following steps: adding the code into a syntax sheet, running the Spearman correlation, recoding to change into a Pearson correlation coefficient, and finally, entering the variables to correlate partially whilst specifying the control variable. The results of the partial correlation matrix obtained can be seen in the table below:

| *Control Variables* | | | *Likes* | *Comments* |
|---|---|---|---|---|
| *Channel type* | Likes | Correlation | 1.000 | .787 |
| | | Significance | . | .001 |
| | | df | 0 | 109 |
| | Comments | Correlation | .787 | 1.000 |
| | | Significance | .001 | . |
| | | df | 109 | 0 |

Table 29. Partial Correlation Results for SM Platform Type

On a sample size of 1669 posts, a partial correlation was run to determine the relationship between “likes” and “comments” whilst controlling for “type of platform” within a significance level of $p < 0.005$. Results of the test indicate that there was a strong positive partial correlation between likes (0-18710) and comments (0-23780), while controlling for channel type (appropriate, not appropriate), which was statistically significant, $r(109) = 0.787$, $N = 1669$, $p = .001$. The Null hypothesis H2d0 is therefore rejected and the H2d1 hypothesis is accepted.

### 3.4. Hypothesis Testing

Based on the structural framework (see Figure 5.), results of testing the relationships between constructs of this study are displayed in Table 22.

| Hypothesis | Analysis Results |
|---|---|
| H1: The strategy formulation process impacts the strategy implementation phase of HEIs. | Supported (Interviews and SEM findings) |
| H2: The strategy implementation process impacts the strategy monitoring phase of HEIs. | Supported (Interviews and SEM findings) |
| H2a: SM platforms' content type impacts the effectiveness of the HEIs E-marketing process, | Supported, the correlation is significant (SM text mining findings) |
| H2b: SM platforms' audience impacts the effectiveness of the HEIs E-marketing process. | Not supported, the correlation is not significant. (SM text mining findings) |
| H2c: SM platforms' timing impacts the effectiveness of the HEIs E-marketing process. | Supported, the correlation is significant (SM text mining findings) |
| H2d: SM platforms' channel type impacts the effectiveness of the HEIs E-marketing process. | Supported, the correlation is significant (SM text mining findings) |
| H3: The strategy monitoring process impacts the strategy control phase of HEIs. | Supported (Interviews and SEM findings) |
| H4: The strategy control phase impacts the new strategy formulation phase of HEIs. | Supported (Interviews and SEM findings) |

Table

Table 30. Summary of the Hypothesis Testing Results.

### 3.5. The Research Questions Addressed

Below, a discussion of the main research questions of this study. More specifically, a comparing and contrasting of the analysis findings of the three methods used in the analysis process namely: interviews, text mining and SEM.

#### 3.5.1. What is the nature of impact of the strategy formulation phase on the strategy implementation phase in HEIs' strategic management process?

Strategy formulation process is the first and fundamental step for a HEI in order to distinguish itself and reflect a clear and understandable vision with SMART goals (Adel et al., 2018). The interview results in this study revealed that the process of strategy formulation in HEIs, if done properly and in respect to all its suggested stages, could indeed have an impact on the next phase of the strategic management process of HEIs, namely: strategy implementation. It is ought to mention that this finding confirms the first research hypothesis and is in line with many research findings on business strategy (Brengman, Geuens, Weijters, Smith, & Swinyard, 2005; Jayawardhena, Wright, & Dennis, 2007; Ganesh, Reynolds, Luckett, & Pomirleanu, 2010). More particularly, in the HE SM field where strategy research is much scarce, we find some studies endorsing the latter finding (Kireyev, Koen and Gupta, 2013; Baroto, Arvand, & Ahmad, 2014; Greer, Lusch, & Hitt, 2017; Adel et al., 2018). On another hand, the results of testing the hypothesized model indicated that the structural path between strategy formulation and strategy implementation was significant. As the findings of hypothesis testing indicated a standardized regression weight = 0.295, standard error = 0.053, critical ratio = 5.549 and the level of significance $p < 0.001$. Implying that strategy formulation positively impacts the strategy implementation. Therefore, the null hypothesis was rejected and the hypothesis H1 was supported. Furthermore, most interviewees agreed that although formulating an online strategy does not always go by a book. Most HEIs start this process from evaluating where the institution is at the moment, and projecting the SMART goals it aims to achieve in short and long term based on tangible metrics. This idea matches the E-branding concept suggested in the literature review to a high extent. The results of the SEM analysis also backup the latter impact of formulating the strategy on implementing it

through results of the test of mediation between the constructs of the research framework (see Table 23.).

### 3.5.2. What is the impact of the content of the SM posts on the effectiveness of the E-Marketing process in HEIs?

In the context of strategy implementation, the content of the SM posts of HEIs is the difference maker in every E-marketing effort as it determines the approach of conveying any message. When it comes to previous research findings, the business side has proved the positive impact of content type on the success of marketing campaigns (Casidy & Wymer, 2015; Khanna et al., 2014; Williams & Omar, 2014). Yet, in the HE settings, this study takes the initiative to endorse the latter finding based of the output of the partial correlation analysis performed in chapter three of the research. As the results of the test indicate that there was a significant positive partial correlation between "likes" and "comments" while controlling for "content type" (academic, marketing, and students-based). However, the interview results yielded two different perspectives; an agreement on the effectiveness of posts' content from marketing managers which is in addition to the latter findings aligned with recent SM literature (Rutter et al., 2017, Bélanger, et al., 2014; Petrova, 2017; Wali, 2018). And another agreement from academics and top management that posts' content is only the scope of the marketing department. This finding draws more attention towards the significance of this study, in terms of informing the top management and academics about the importance of a creating a proper content which reflects the authentic perspective of all parties in a university in accordance with its strategy. In fact, an important finding of this research is the categorization of content by type of audience. As marketing managers have agreed that even though the content is the same at essence, the ways of sharing it must vary across SM platforms. They insisted that Facebook content is tailored to an audience or readers, therefore, little imagery and more writing is the main focus of its posts. However, Instagram content heavily relies on the visual factor, as the main audience to be found there are current students of the university. And lastly, the same content is presented on Snapchat or TikTok using multiple sound and visual effects to attract the attention of a younger audience which is the potential students of the university. This finding on the categorization of content

type is enforcing the finding of the partial correlation on the increase of the correlation between likes and comments when the content type in kept under control.

### 3.5.3. What is the impact of the choice of audience of the SM posts on the effectiveness of the E-Marketing process in HEIs?

According to several findings in business literature such as Constantinides & Stagno (2012), Galan et al. (2015), and Obar & Wildman, (2015), the choice of a proper audience in a SM platform is deemed of big importance for the effectiveness of marketing efforts. The aim of this research question was to investigate the impact of targeting a proper audience on the effectiveness of the E-marketing in HEIs. And within a significance level of $p < 0.005$, the results of the partial correlation test indicated that the correlation between the hashtag and the comments had a value of 0.102 (above 0.005). Therefore, it was deemed not significant. This finding though contradicts with most of the research undertaking the SM targeting strategies (Bolat & O'Sullivan, 2017; Dagli, 2020; Lim, 2015; Ogaji et al., 2017; Perifanou et al., 2021). In addition, findings of the interviews deemed the appropriate audience choice a scope of the marketing department (as per academics and top management). Whereas, the marketing managers sought proper audience choice as an impactful aspect on the effectiveness of the E-marketing process of HEIs. In fact, an interesting finding of this study regarding the importance of audience choice stems from the agreement of marketing managers that the audience of the university varies across SM platforms. And that the traffic on Facebook comes mainly from audience(s) aged 30 and up. While on Instagram it comes from audience(s) aged between 19 and 28. And on TikTok, from audience(s) below 19. Therefore, this research question requires further investigation and consideration from the academics and top management side.

### 3.5.4. What is the impact of the timing of the SM posts on the effectiveness of the E-marketing process in HEIs?

Timing of posting on SM and its effectiveness on the E-marketing was investigated. Where findings of the partial correlation test showed that there was a significant (0.363) and strong partial correlation between "likes" and "comments" numbers while

controlling for "timing". Endorsing this co-relationship similar to various research findings on this topic (Kimmons, Veletsianos, & Woodward, 2016; Palmer, 2013; Yolcu, 2013). On the other hand, the academics and top management considered the choice of posts' timing a scope of the marketing department only. In turn, the marketing managers considered timing choice to be indeed impactful on the E-marketing strategy. This is in line with previous findings (Mahabir Narwal & Ravi Kant, 2014; Ogaji et al., 2017). Furthermore, some interview findings yielded an agreement from top managers and marketing managers on the importance of posting content regarding the academic activity of the university accurately and promptly. As deadlines are of great importance for both the audience and the university, and posting without respect to the real-life timing of the content gives a negative impression on the HEI. Marketing managers also highlighted that timing of posts is also closely linked to high traffic hours on SM pages of the university. As the audience can come from different geographic locations, which implies many peak traffic times for the university. And taking note of these times with the help of the SM analytics helps guide the proper targeting of main audiences through proper scheduling of the content.

### 3.5.5. What is the impact of the channel type of the SM posts on the effectiveness of the E-Marketing process in HEIs?

This research question was concerned with the difference of effectiveness of the E-marketing throughout different types of SM platforms. By looking at the results of the hypothesis testing, it is easy to conclude that the strongly positive partial correlation between "likes" and "comments" while controlling for "channel type" was significant at p=0.0001. In addition, the interviews yielded a support to the hypothesis testing results by the marketing managers. However, academics considered the choice of a SM platform one of the scopes of the marketing department. In fact, the business literature has sufficient research that endorses the same findings of this study and suggests a wise choice of SM platform in order to convey the various messages of the institution (Kireyev, Koen and Gupta, 2013; Perifanou et al., 2021). Furthermore, interviewees from top management of HEIs have started to perceive that SM channels, if chosen properly, have become tools to highlight particular academic contents that was not receiving the attention from the masses. A rector stated the example of using

LinkedIn to share the research articles and findings that were limited in terms of access to the scientific community mainly with the public using simplified perspective and language. Which resulted into a wider reach and interaction when using the appropriate SM platform to share the appropriate content.

### 3.5.6. What is the nature of impact of the strategy implementation phase on the strategy evaluation phase in HEIs' strategic management process?

Implementing a strategy properly is a facilitator of ensuring an accurate evaluation process for it in the next stages (Kettunen, 2011; Stukalina, 2014; Felix, Rauschnabel and Hinsch 2017). Some previous studies proved a strongly positive relationship between the strategy implementation phase and the strategy evaluation phase in the HE context (Evans, 2009; Beal, 2014; Bernstein, 2014). While the result of hypotheses testing showed the significant effect based on the fact that standardized regression weight = - 0.027, standard error = 0.071, critical ratio = 6.761 and level of significance $p < 0.001$. The value of standardized regression weight also indicated that the relationship between strategy implementation and strategy evaluation is positive. Furthermore, findings from the interview endorsed the fact that proper implementation of a strategy implies a width of evaluation possibilities. More particularly, marketing managers agreed that properly combining the four SM metrics namely: "content", "timing", "channel" and "audience" during the strategy implementation phase, ensures acquiring an accurate E-feedback with minimal gaps. The E-feedback serves as a basis for a proper evaluation of the E-strategy of HEIs afterwards. Therefore, the research question was answered through the latter findings.

### 3.5.7. What is the nature of impact of the strategy evaluation phase on the strategy control phase in HEIs' strategic management process?

Strategy evaluation measures are deemed to affect the strategy control process in business institutions (Constantinides and Stagno, 2012, Galan et al., 2015). Previous findings have proved a link between evaluating and controlling in various business fields such as banking, health, and retail (Stukalina, 2013; Kettunen, 2011; Felix, Rauschnabel and Hinsch 2017). Whereas, in the context of the current research, the

result of hypotheses testing depicted a significant effect based on the fact that standardized regression weight = - 0.027, standard error = 0.071, critical ratio = 6.761 and level of significance $p < 0.001$. Meanwhile, interview findings supported the existence of a positive impact between the accurate evaluation of a strategy and a proper control of its spinoffs. The support came from all the categories of respondents namely: academics, top management, and marketing managers. The latter finding is in alignment with several research such as (Rutter et al., 2016, Bélanger, et al., 2014; Petrova, 2017; Wali, 2018). More specifically, Interviewees have agreed that when evaluating the effectiveness of an E-strategy, analytics reports from SM platforms are considered a very useful tool to compare the previously set goals to the actual output of the strategy. Google analytics tools were also mentioned by marketing managers to be opted for in terms of insights on the traffic on the university's SM. Academic, from their side highlighted their participation in this process through providing replies and content on SM based on the E-feedback received from the target audience(s) of the institution. Especially, in the case of specific comments or requests related to the academic programs of the university. Top management believes that at the evaluation stage of the university, the tracking and filtering if the E-feedback is a crucial success indication of the phase. And that going further into creating a FAQ data base that is updated regularly would make the evaluation of the strategy very efficient, in addition, it would facilitate the next phase of the strategic management process which is strategy control in terms of providing a basis for the overall analysis of the E-strategy output. The latter findings of this research certainly endorses the fact that the strategy evaluation phase impacts the strategy control phase in HEIs' E-strategy.

### 3.5.8 What is the nature of impact of the strategy control phase on the strategy formulation phase in HEIs' strategic management process?

A very important move in business strategy, is to learn from previous mistakes and expand previous successes. Some studies have shed the light on this aspect in the strategic management process (Efimov and Lapteva, 2012; Casidy & Wymer, 2015; Khanna et al., 2014; Williams & Omar, 2014). Although the current study took an initiative of investigating the latter impact in HEIs context, and the hypothesis testing yielded a positive output with the standardized regression weight = - 0.027, standard

error = 0.071, critical ratio = 6.761 and level of significance $p < 0.001$. The value of standardized regression weight also validates that the relationship between strategy control and strategy formulation is positive. In addition, interviews endorsed the quantitative findings as well, with most of respondents highlighting the importance of learning from previous organizational mistakes, and incorporating the change accordingly to the new strategy. In this vein, one key finding and suggestion of this study was discussed and agreed upon by top managers and marketing managers alike. Which is the necessity of creating a system to organize and optimize SM activity and output in the university and synchronize it with the internal system of the institution. The system was suggested to be designed by the IT department in collaboration with the marketing department of the HEI. Using Artificial Intelligence (AI), SM analytics reports and internal info on staff and academics from the intranet, the system makes use of SEO techniques in order to profile the audience on SM and categorize the input received from all platforms. It then filters the requests and forwards it to the appropriate academic or staff members. The system also was suggested to be synchronized with the data base of the university's call center, and with the email marketing data base in order to better target current and potential students and answer to their requests promptly. And Finally, the system was suggested to generate weekly reports for every academic and staff member detailing their intranet and SM activity, and the feedback received from the audience (if any). Marketing managers suggested synchronizing the system with governmental institutions for more transparency and ease of validating accreditations given by the institutions to students, which will certainly boost and increase the credibility of the university. It is also worth to mention that with the agreement of most interviews and the SEM results, the output generated from the proposed system and from the strategy control phase represents a base to build on the new strategy formulation of HEIs. With that being said, this research question was addressed by this study. Which in turn was found to be in line with several HE oriented studies such as (Obar & Wildman, 2015; Constantinides and Stagno, 2012, Galan et al., 2015; Efimov and Lapteva, 2012).

# 4. CONCLUSION

## 4.1 Theatrical Contribution

This research has attempted to explore a novel area in HE management, and has shed the light on the importance of SM in the strategic management process of HEIs. Therefore, one of its core highlights is its theoretical aspect. Where the literature review has offered new definitions and perspectives on SM use in higher education. It mainly presented the metrics of SM integration into the strategic ecosystem of a university based on previous findings. Another essential theoretical contribution of this research is the introduction of a step by step online branding process for HEIs. In Addition to a review of the classical strategic management process with a contemporary integration of SM metrics as mentioned earlier. And finally, the main theoretical contribution of this study was the theoretical research framework, which was proposed in light of both previous findings and the integrated management theory.

## 4.2 Managerial Implications

In this study, the findings of the hypothesis testing have yielded some key insights for the researched sample namely: managers, top management of HEIs and academics. Marketing managers in HEIs are aware of the main task of managing the SM platforms of a university. However, an in-depth analysis and understanding of the targeted market, the current traffic interactions and the feedback on the university's SM pages are keys to better tailoring of the content. And therefore, meeting both the strategy and stakeholders' expectations. In this vein, enhancing the SM management skills and techniques of the HEIs marketing department yields positive returns for the department and the university. On the other hand, the findings of this study such as the role of SM in strategy formulation and strategy control, are a sign for top management to allow more room for the feedback received from SM platforms to play a role in formulating the strategy of the HEI. And to allocate sufficient budgets for an online strategic marketing and SM management tools. Finally, academics, who are the most in touch

with students must provide insights on the perception and satisfaction levels of students with the current strategy of the HEI. This study suggests a direct and indirect integration of academics into the online and offline strategy formulation and implementation. Since academics are the face of the university and the value creators after all.

### 4.3 Limitations and Direction for Future Research

This study represents an initial attempt to offer a comprehensive framework for SM strategy in HEIs, yet further work remains to be done. Particularly, we identify three limitations of the current study namely: sample size, research instrument and cultural diversity of the research sample. Given that the sample was comprised of respondents from three countries only namely: Turkey, Uzbekistan and the United Kingdom. The findings' generalizability will be limited to an extent. Thus, future studies can test the results of the research instruments and framework in further countries. Secondly, the main research instrument used in this study was a questionnaire, future research could incorporate more instruments aiming to test the feasibility of the suggested framework such as focus groups. Which will allow for further validation and extending of the findings. Finally, although the sample size used for this analysis was satisfactory for an SEM analysis, more data should be collected for more generalizability of findings.

**Appendix A: Questionnaire**

**T.C**

**Istanbul Commerce University**

Greetings,

I m a PhD. student at the Faculty of Business Administration at Istanbul Commerce University. The attached questionnaire is part of a research paper that has been created to study the integration of social media into organizational settings!

In order to accurately respond to the following questions, please keep in mind the type of influence you get from the Social media platform of your university.

Please specify the name your University:

…….....……..

Please be assured that your responses are strictly for academic purposes only and will be treated as strictly confidential.

If you have any questions or concerns, please do not hesitate to email me at djihane.amari@yahoo.com . Thank you for your participation in this study.

Sincerely,

**SECTION I**

**Background information**

**Instructions**: Please fill the blanks and tick (√) the boxes applicable to you.

**Gender**

☐ male ☐ female

**Age group**

☐ 20-25 ☐ 26-30 ☐ 31-38

☐ 39-46 ☐ over 47

**Job title**

☐ marketing manager ☐ academic ☐ a managerial position

**Professional**

1. Please specify your background (area of expertise, ex: Literature, management, Finance, etc.)?
   …….

2. How long have you been studying\working at the university (the number of years of study for students)?
   ……

## SECTION II

## A: FORMULATING A STRATEGY

**Instructions:** The following section helps the researcher understand the strategy formulation please read each statement and choose the number that indicates how much the statement applies to you.

| | FORMULATING STRATEGY | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| **1** | Universities are showcasing their SM platforms well. | **1** | **2** | **3** | **4** | **5** |
| **2** | Universities communicates their core values online. | **1** | **2** | **3** | **4** | **5** |
| **3** | Online branding gives a competitive advantage over other universities. | **1** | **2** | **3** | **4** | **5** |
| **4** | SM content may attract students from abroad. | **1** | **2** | **3** | **4** | **5** |
| **5** | Online logos, images, and symbols are associated with the university in reality. | **1** | **2** | **3** | **4** | **5** |
| **6** | Not many departments could be involved in designing the strategy of a university. | **1** | **2** | **3** | **4** | **5** |
| **7** | The promised programs offered online must align with the mission and vision of the university. | **1** | **2** | **3** | **4** | **5** |
| **8** | If a university seems prestigious on SM I may consider studying\working there. | **1** | **2** | **3** | **4** | **5** |
| **9** | If a university seems International on SM I may consider studying\working there. | **1** | **2** | **3** | **4** | **5** |
| **10** | If a university offer a good social life for students I may consider studying\working there. | **1** | **2** | **3** | **4** | **5** |
| **11** | Programs, fees, location, scholarships, etc. are preferably to be found on the SM of the university. | **1** | **2** | **3** | **4** | **5** |
| **12** | Online competitors are not a big influence in the design of university strategy. | **1** | **2** | **3** | **4** | **5** |
| **13** | The online and offline marketing objectives of the university may not be the same. | **1** | **2** | **3** | **4** | **5** |

## B: STRATEGY IMPLEMENTATION

**Instructions:** The following section helps the researcher understand the strategy Implementation Process. Please read each statement and choose the number that indicates how much the statement applies to you.

| | STRATEGY IMPLEMENTATION | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| **1** | SM platforms do not illustrate well the strategy of a university. | **1** | **2** | **3** | **4** | **5** |
| **2** | SM platforms have a potential to Illustrate the strategy of a university. | **1** | **2** | **3** | **4** | **5** |
| **3** | SM platforms help deliver updates to the audience of the university. | **1** | **2** | **3** | **4** | **5** |
| **4** | Posts, videos, and other sorts of interactive content can be a way to explain the strategy of the university. | **1** | **2** | **3** | **4** | **5** |
| **5** | All types of content can be posted on any SM channel. | **1** | **2** | **3** | **4** | **5** |
| **6** | The content posted by universities can reach the wrong audience. | **1** | **2** | **3** | **4** | **5** |
| **7** | The choice of timing is not very important when sharing updates through SM platforms. | **1** | **2** | **3** | **4** | **5** |
| **8** | The steps of implementing a university strategy will determine the process of evaluating it. | **1** | **2** | **3** | **4** | **5** |

## C: STRATEGY EVALUATION

**Instructions:** The following section helps the researcher understand the Strategy Evaluation Process. Please read each statement and choose the number that indicates how much the statement applies to you.

| | STRATEGY EVALUATION | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| **1** | The outcomes of the university strategy can be compared with initial goals. | **1** | **2** | **3** | **4** | **5** |
| **2** | The feedback of users on SM is not very important . | **1** | **2** | **3** | **4** | **5** |
| **3** | User feedback can help reflect on the overall performance of the university. | **1** | **2** | **3** | **4** | **5** |
| **4** | The SM feedback can be useful for the top management | **1** | **2** | **3** | **4** | **5** |
| **5** | The feedback should not be disclosed to other departments | **1** | **2** | **3** | **4** | **5** |
| **6** | Posting replies to comments on SM implies a positive brand perception from the audience. | **1** | **2** | **3** | **4** | **5** |
| **7** | Evaluating a university strategy will help the process of controlling it. | **1** | **2** | **3** | **4** | **5** |

## C: STRATEGY CONTROL

**Instructions:** The following section helps the researcher understand the Strategy Control Process. Please read each statement and choose the number that indicates how much the statement applies to you.

| | STRATEGY CONTROL | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| **1** | The strategy of the university can be controlled. | **1** | **2** | **3** | **4** | **5** |
| **2** | A system of SM feedback management can be used by the university. | **1** | **2** | **3** | **4** | **5** |
| **3** | Managing the SM feedback strategy requires a team. | **1** | **2** | **3** | **4** | **5** |
| **4** | Managing the SM feedback strategy does not require a department. | **1** | **2** | **3** | **4** | **5** |
| **5** | Knowledge of analytics can help in managing SM feedback. | **1** | **2** | **3** | **4** | **5** |
| **6** | A university's SM platforms constant monitoring may improve its performance. | **1** | **2** | **3** | **4** | **5** |
| **7** | A well-established feedback system must be Omni-channel. | **1** | **2** | **3** | **4** | **5** |

***Thank you very much, for participating in this survey.***

## Appendix B: Interview Questions

| |
|---|
| What is your perspective on SM use in HE? |
| How do you assess the current HE market in your country? |
| Which universities in your country or worldwide you follow their SM or take as a role model? |
| Can you describe the SM platforms of your university in terms of performance? |
| What is your main strategy on SM (brand awareness, brand loyalty, etc.)? |
| Do you use any "online business model" on SM? |
| What do you think of "E-branding" and how does it apply to your institution? |
| How do you formulate a SM strategy (any processes and models!), |
| Do you gather data on the competitors' online performance? |
| How important is the content of your posts? |
| How important is the timing of your posts? |
| How important is the channel of your posts? |
| How important is the audience of your posts? |
| How do you handle students' feedback on your SM (the positive and the negative)? |
| How do you handle the E-CRM on your platforms? |
| How can the university's strategy on SM channels be effectively controlled? |
| Do you think a feedback management system can be useful? |
| Does the SM analytics reports matter to the university? |

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