

# Open NCI Strategic Analysis

A feasibility study on the online education market

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Terminal-Bases Assessment Assignment

Business Analysis & Communication

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## Executive Summary

The current COVID-19 outbreak has transformed the way we live, work and study. In a time of uncertainty where schools had to close, colleges had to find an alternative way of delivering classes and assessing students remotely. This external factor has led the National College of Ireland (NCI) to discover the opportunity of opening an online college called Open NCI. Other opportunities have revealed that the online education market is globally expanding with a Compound Annual Growth Rate (CAGR) of 28.55% between 2017 and 2023 (Market Research Future, 2019); while at the same time the amount of students enrolment is constantly increasing (HEA, Higher Education Authority, 2014). To respond to this growing demand, NCI has already started offering online courses and some blended learning. It was analysed in the current state that NCI has the capabilities and the finance to continue in this direction, but we defined in the change strategy that the college still has to improve some technological tools, social aspects and provide lecturers with required competencies to achieve its goals. Therefore, the recommendation is to continue with the current strategy and increase the online courses offering.

## Introduction

Through this report we have combined several techniques, models, and a mind map (appendix 5) to analyse the competition, to define NCI's current and future state and to propose a solution aligned with the college business needs. The first part focuses on understanding the online education market whereas the second part is a description of NCI current situation. With these two investigations combined we managed to highlight the goals that NCI should reach and the gaps to be able to reach them.

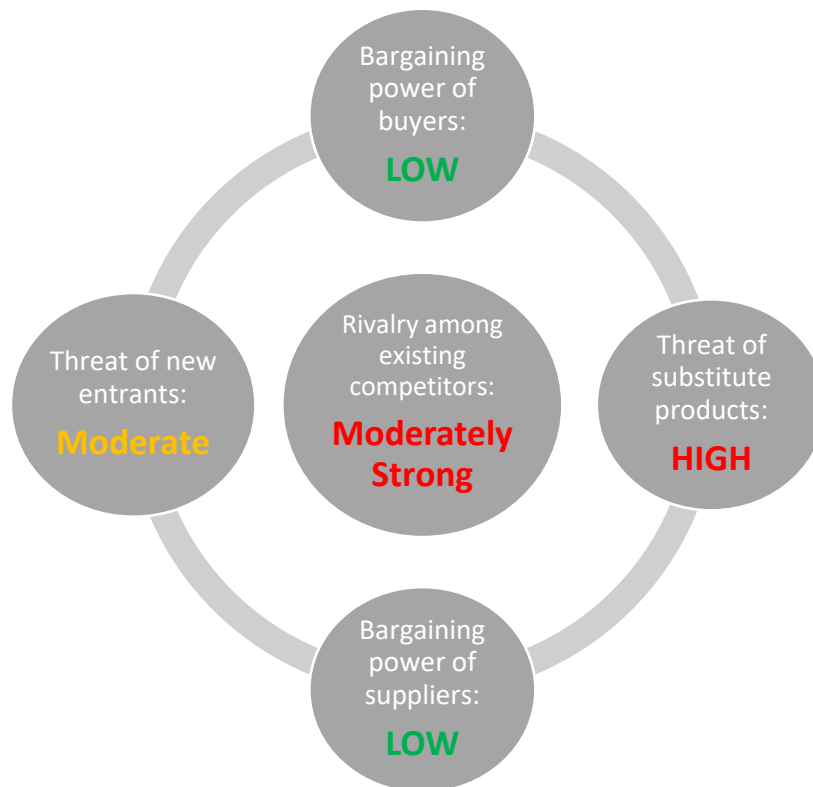
## Competitive Analysis

The competitive analysis is necessary to understand the market where we are evolving. Companies that are seeking for a change of strategy have to analyse the environment and understand the context of the change. By using the "Porter's 5 Forces" and "SWOT" analysis, we can highlight the threats and opportunities that NCI is facing. Additionally, by analysing the direct competition, we can use a college best practices and Key Performance Indicators (KPI's) as a benchmark. This will allow us to build a solid ground to provide a realistic strategic analysis.

### Porter's 5 Forces

As per Porter: "To understand industry competition and profitability[...], one must analyse the industry's underlying structure in terms of the five forces." (Porter, 2011) To have a more holistic view of the online education market, we will use Porter's 5 Forces (See in figure 1 the summarized analysis). The objective of this section is to measure the attractiveness of the market in terms of profitability. Although NCI is a non-profit organization, as any other business we must investigate if this market can offer profitable results.

Figure 1: Summarized Porter's 5 Forces



#### Rivalry among existing competitors

The rivalry among competition in the online education market could be considered as moderately strong. Moderate because colleges and universities are differentiated by offering a wide variety of online courses. For example, Stanford University in California offers 166 online various courses (Stanford Online, 2020). However this force is strong since there are many institutions all over the world offering the option of online classes, with over 240 degrees available in Irish higher degree institutions (Study Portals Online Courses, 2020) and over 32,661 online undergraduate and postgraduate diplomas in the USA (Guide to online schools, 2020). The barrier to exit of the existing colleges and universities are high since there are important fixed costs involved and especially for all universities that are depending on public funding. Another aspect that would increase the rivalry is the college reputation and ranking that can be found in the QS World University Rankings. Finally, education awards are also a source of recognition that can be a trigger for students to choose an institution over another.

#### Threat of new entrants

When new entrants enter an existing market with differentiation, it can put pressure on existing businesses that will have to lower prices or increase investment to keep up with the market shares. (Porter, 2011). To determine the threat of new entrants, we must inspect the barrier to entry.

#### Barriers to entry

For a college, fixed costs and investments are high especially if a college wish to accept many students, not only we have to think of capacity but also develop appropriate facilities to accommodate them. However, if there is a wish to “build” an online college, the investments will be less than a physical establishment as the classes will happen online and do not require an increase of classrooms. Fixed costs will remain the

same and include the online learning platform, online class software and licences to name a few. Another barrier could be the accreditation of courses and expertise. One cannot create an online college without the knowledge from experienced lecturers and a certified education body should validate the quality of the programmes offered especially when it comes to higher degree certificates. Furthermore, we should consider the brand loyalty or the college reputation as big barrier to entry.

To conclude, knowing that the barriers are medium, we will consider that the treat for new entrant is moderate to enter the online education market but are low for a college that already has a good reputation.

### Bargaining power of buyers

Powerful buyers can have a strong impact on companies and put pressure to lower the price and improve the quality of the product. (Porter, 2011, p. 52) Still, in the case of online education, the bargaining power of buyer is low. First, because the amount of student enrolling into higher education keep increasing each year. In the year 2017/2018, the number of students enrolling in higher study in Ireland was 231,710; this is 11% more than in 2013 (HEA, Higher Education Authority, 2018). On the online education side, nearly 8,000 students were enrolled for remote mode studies in 2017/2018, which represent more than 3% of the total amount of enrolment. The amount of remote students has increased by 91% going from 4,160 in 2013 to 7,967 in 2017 (HEA, Higher Education Authority, 2014, p. 7). Secondly, because the products are differentiated; the Irish higher education institutions offer over 180 courses fully online with a good diversification going from Ancient philosophy to Biopharma. Finally, customers switching costs are high considering that students are investing for one or many years of college, on rare occasion they would switch to another institution.

### Bargaining power of suppliers

If a supplier has a high bargaining power, then they can decide to charge a higher amount and do not need to improve quality of the product or service offered. (Porter, 2011, p. 50)

When it comes to defining suppliers, we find many different types of learning management systems such as Moodle, Canvas, Open edX and Blackboard; just to name a few. To conduct remote class, there are many companies offering this service (e.g., Zoom, Bluejeans, Microsoft teams, Adobe connect and many more). We can see that there is a lot of competition among online conferencing software and that it will not be a problem for colleges and universities to bargain the price down. Moreover, the switching costs will not be high in case a college has to change supplier, licence have to be renewed each year so if a school decides to change, it will not add more costs. For Adobe Connect a licence costs EUR 3,220 per year for a virtual class of 200 students. (Adobe Connect, n.d.)

In conclusion, the above demonstrates that the bargaining power of supplier is low, thanks to the multitude of software companies developing diverse tools at a low switching cost.

### Threat of substitute products

In a market, a substitute consists of a product that would offer the same benefits or service but using a different method. Unfortunately, some substitutes are often ignored due to their different feature or aspects even though they offer the same service. (Porter, 2011)

In the e-education market, there are a multitude of substitutes such as online learning platforms (Datacamp, LinkedIn learning, Udacity) or free online educational videos on social media. American universities offer online education platforms, e.g., with Coursera created by Stanford professors or EDX by

Harvard and MIT; they usually provide MOOCs, which means Massive Open Online Courses, and are “free online courses available for anyone to enrol” (Mooc.org, 2020). This delivery method is a flexible and inexpensive way to access higher education programmes. Although the line between competitors and substitute is fine especially when it comes to universities, we can consider a product as substitutes when the programme does not offer an accreditation (Murray, 2019) the way universities and colleges do.

With these substitutes, students have the choice to learn online and for free, which is a big competitive advantage against the current higher education market. Thus, it is where educational institutions must constantly update their methods and strategies to keep up the distance from the high threat of substitutes.

## Direct Competition

After evaluating the level of rivalry among competitors, we can define NCI’s direct competition to compare and benchmark colleges services. NCI is an independent, non-profit, and partially State aided organization (Education in Ireland, n.d.). To determine the direct competition, we selected private colleges that offer the same type of programmes as NCI and that are also part of the Higher Education Colleges Association (HECA). The HECA represents Irish independent higher education institutions and provides “Quality & Qualifications Ireland (QQI)” programmes accreditation (Higher Education Colleges Association, 2020). It is deliberate to disregard universities due to the size difference and the fact that they are public institutions.

## Benchmarking

Five colleges and business schools have been selected. The competition grid in table 1 displays the name of the institutions and compares the schools by number of students, number of programmes, whether an online class option is available and the course fees for the same type of course. Also, for the purpose of this study, we also noted the type of learning platform used as well as the online class software used when applicable. The objective of this grid is to compare the size of the colleges in terms of students and the diversity of programmes offered; as well as it determines how advanced is the direct competition in terms of online education.

Table 1: Competition grid

College/School name	Number of students	Number of programmes available	Online course available	Online Class tool or software	Learning platform	Course fees Bachelor (Hons) full time
NCI National College of Ireland	5416	88	YES (6)	Adobe Connect	Moodle	4500€
DBS Dublin Business School	9000	152	YES (10)	Zoom	Moodle	5895€
CCT College Dublin	1000	33	NO	NA	?	5000€
Dorset College	Non-disclosed	18	NO	NA	?	5200€
GBS Galway Business School	?	19	NO	NA	Moodle	4850€
Griffith College	7000	175	YES (12)	Zoom	Moodle	5650€

## Positioning

Giving to the information gathered in the competition grid and to finalize the comparison between the competitors, we have used a competitive map to visualize the positioning of each business. Competitive mapping is a technique used to compare the position of businesses using two variables that are considered as decision criteria by the customers (Spacey, 2017). The competitive map shown in figure 2, compares the schools using two variables such as the number of programmes available, which can be defined as diversity and the availability of online courses. The graph confirms a segregation with on one hand, three colleges (CCT College Dublin, Dorset College, Galway Business School) that offer less programme variety and are not conducting online classes. On the other hand, we find Dublin Business School, Griffith College and NCI on the top right offering a broad diversification in terms of courses but also offer online option. NCI being behind DBS and Griffith College shows that despite the competitors' size (in terms of students) they are ahead of other colleges in terms of online offering.

Figure 2: Competitive map



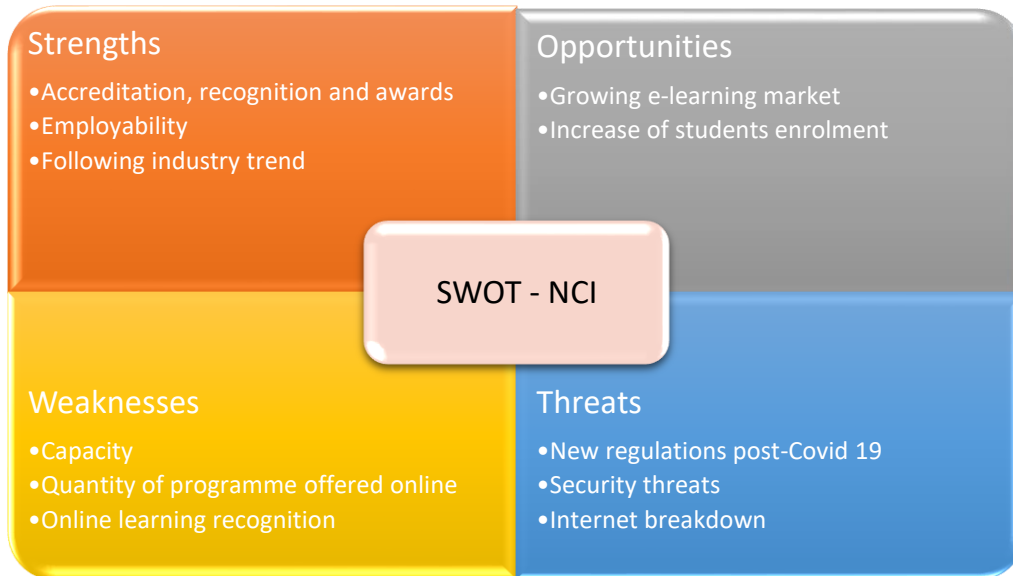
## SWOT Analysis

When an organization wants to develop its business, it must complete a strategic planning. One of the most used technique is the SWOT analysis. It is a way to define the current state of an entity by identifying the Strengths, Weaknesses, Opportunities and Threats that a company has or is facing (Bertelsen, 2012).



To understand the current position of NCI within the online education market, a SWOT analysis has been made (see Figure 3). Given that the Weaknesses and Strengths are compared with the competition, we chose to use the direct competition analysed in the previous part as a point of comparison.

Figure 3: SWOT Analysis



## Strengths

To define NCI strengths, we have distinguished advantages that the college has over the competition and the differentiation of the school.

### Accreditation and recognition

A college can depend on accreditation and awards to gain recognition. NCI courses are certified by the awarding bodies Quality and Qualifications Ireland (QQI). This authority makes sure that the courses are up to standard and are relevant to the labour market while following the National Framework of Qualifications (NFQ). Other awarding bodies also include the Chartered Institute of Personnel and Development (CIPD), Institute of Commercial Management (ICM) and Association of Chartered Certified Accountants (ACCA). (NCI, 2020) The National College of Ireland also won awards such as “Overall Excellence in Education”, “Career Impact Strategy”, “Best Marketing/ Communications Team” in 2019 and “Best Library Team” in 2020. (The Education Awards, 2019)

### Employability

Not only has the college a strong and dedicated career team but it has also been awarded multiple times for employability. For example, with the “Winner of the AHECS Excellence in Employability Award” in 2013, 2014, 2016 and 2018 and the 5 Stars award at the “QS Stars Rating System for Employability” in 2019 (NCI, n.d.). Employability could be considered as a Unique Selling Proposition (USP) of NCI with a successful employability rate of 98% in 2018 (NCI, 2018).

### Following industry trend

Another advantage that NCI has is that it follows the industry trends and keeps updating the courses following the industry demand. With the Springboard initiative, NCI offers courses that will fill in the skills gap and help professionals to upskill to remain relevant in the labour market.

## Weaknesses

As seen previously in the direct competition part, NCI is a smaller structure compared to Griffith College or DBS with less students, less programmes, and therefore less online programmes. Even though the size does not matter, an increase of students means an increase of revenue.

### Capacity

According to an article of the Irish Times in 2017: “The current campus, based in IFSC<sup>1</sup>, has reached maximum capacity, and the number of students entering higher education in the next five years is set to grow considerably”. (Power, 2017) This means that the demand is growing, and that NCI could miss an opportunity to welcome more students and therefore miss the chance to increase enrolment income.

### Quantity and variety of online programmes offered

NCI counts 6 online programmes with the focus on finance and IT (computing). Whereas DBS and Griffith College offer over 10 and 12 programmes, respectively. These two colleges offer a larger variety of courses, especially Griffith College with accounting, business administration (offering MBA), law and pharmaceutical. It is understood that NCI might want to be more specialized in the computing and business field which are in high demand and this might be the reason why they intended to double IT courses (Power, 2017).

### Online courses recognition

Even though the college offers an online mode of learning, it is not yet an expert in the area. Griffith College, on the other hand, has a good reputation of the online and blended learning<sup>2</sup>. It has been awarded for “Best Online Learning Experience” at the Education Awards in 2019 for its blended programmes and ended up finalist for the “Best Use of Educational Technology/ICT Initiative of the year” in 2020 (Griffith College, n.d.). This might not be considered as a weakness, however if NCI wants to open an online college, a benchmark on the best performers in online education will have to be done.

## Opportunities

With the Coronavirus outbreak and public institutions having to close their doors, opening an online College can be considered as an opportunity for the short term. Furthermore, we have found other opportunities that have to be considered for the SWOT analysis.

### Growing Online Education Market

According to Market Research Future: “The Global Online Education Market is expected to expand at a 28.55% CAGR during the forecast period, 2017–2023” (Market Research Future, 2019). It is also confirmed that the online education industry will reach up to USD 423 billion by 2023. The market is rapidly growing as students who have a preference to study online, have more opportunities by using laptop or tablets; and we can see a constant increase of nearly 1% each year in laptop and tablet revenue (Statista, 2020).

### Increase of students’ enrolment

Student enrolments in Ireland increase each year of approximately 2 to 3 percent, moreover remote study enrolment has almost doubled with 4,160 in 2013 to 7,967 in 2017 (HEA, Higher Education Authority, 2014). We can see here a good opportunity for the year to come especially if the amount of remote enrolment doubles every four years.

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<sup>1</sup> Ireland’s International Financial Services Centre

<sup>2</sup> Flexible study method that combines both in-classroom and online experience (Griffith College, n.d.)

## Threats

### New regulations post Covid-19

When the schools will re-open, there will probably be new regulations related to social distancing. Classes will have to be adjusted to respect the 2 meters social distance and the main hall will have to be monitored to make sure it is not packed with the risk of potential virus transmission. It has been chosen to add this aspect as a threat for the college however it is considered as an opportunity for online classes.

### Security threats

In the era of data protection, every online institution must make sure to comply to GDPR regulations and to have a system that protects information. If the property management system of a famous hotel chain can be hacked twice (Barrett, 2020), then an open source learning management system such as Moodle can also be compromised. Therefore, an online college containing a large amount of data will have to invest in online security to protect students and college data.

### Internet breakdown

How can online classes be efficient if there is an internet breakdown? For the college, we know that there is an IT support team available that can fix any issue internally however it can be an issue for students that live in remote places and have limited connexion. It can be a threat as students may not enrol in an online programme just because of their internet access.

## Strategic Analysis

After having analysed the competition and understood the online education market, we will now focus on NCI's internal elements to define where the company is standing now and where it wants to be. The strategic analysis will be completed following the steps of the Babok guide (IIBA, 2015, p. 99).

### Current State

Understanding how NCI is currently doing will help develop gaps when the change of strategy will take place. To find out the current state, we used techniques such as the SWOT analysis, surveys, interviews, and document analysis.

### Business Need

In the context of the COVID-19 outbreak, all institutions had to close, students are not able to go to college, therefore the college had to find temporary remote alternatives to deliver classes and replace terminal exams. In the mid-term and following the new safety measures in place such as social distancing or limitation of people per square meter, NCI will have to take safety actions to avoid crowded halls and probably decrease the number of students per class. Having to refuse students applications because of capacity and distancing measures will cause a loss of revenue for the college. Due to this external driver and thanks to the opportunities developed in the SWOT analysis, NCI has determined that there is an occasion to develop an online college.

### Organizational Structure and Culture

The organization of current online classes in NCI involves several communication channels such as emails, online conference software, learning management system and other video or chat options. Lectures are

delivered via an online conference software called Adobe Connect, it is mainly how students can interact with the lecturer. The lectures are recorded, however as per experience, it happens that students often have to remind lecturers to start the recording. The learning management system Moodle is an open source platform where students can access slides and information provided by the lecturer.

The organizational culture defines the values, the beliefs and the way people interact within an organization (IIBA, 2015, p. 106). Culturally speaking, online students are less involved in the college life and activities than in-class students. According to an online student survey (see results in appendix 1), 46.7% believe they are missing the social aspect of being in the college. Also when interviewing two other students (one was studying online in another college and one was studying in class at NCI), both confirmed that they preferred to physically attend college for the direct interaction with the lecturer and social contact with other students (interviews in appendix 2).

On the other hand, 60% of the students prefer the online mode of learning than to physically attend a course and all of them agreed with the convenience that online learning provides over physically attending a college. Most students would recommend online studies (87%) and the interesting part is that 73% would not be able to follow the course they are following if it were not online. All these figures prove that the cultural aspect of a college is somehow important, although the choice of studying online depends highly on the flexibility offered.

### Capabilities

Capabilities are defined by the products or services offered by a company and the knowledge it has (IIBA, 2015, p. 106). In terms of capability, NCI offers not only online lectures provided by competent teachers but also provides tools and various support. For technology support there is an IT team available and for research support the library proposes online database sources with possibility to ask questions using a chat service, although some books are only available physically in the library and cannot be consulted online. The college also offers computing support for online students with tutorials and workshops (NCI, n.d.). The career service is an award-winning department of NCI. Firstly, they offer individualized career counselling and give students the tools to promote themselves. Secondly they act as a bridge to the labour market by preserving relationships with employers and finally they update the college regarding the new industry trends (NCI, n.d.). To conclude, all the above services are provided for online students, which means that despite the distance, NCI has the capabilities to provide quality service to online students.

### Infrastructure and Technology

In terms of infrastructure, it was highlighted in the weaknesses that the current building at IFSC is reaching its maximum capacity in terms of students, however the online infrastructure is almost unlimited and offer many possibilities to communicate.

The technology used to offer an online college experience includes online learning management software such as Moodle. Online classes are presented using Adobe Connect and RPNOW software is used to complete exams online. Moreover, there are various communication tools proposed with the whole Microsoft package. Online students also use massively online messaging tools such as Whatsapp to communicate and ask questions within groups or class. Finally, the college purchases many licences to offer students and other stakeholders diverse IT facilities, e.g., Office 365 and student email account, programming tools, Citrix and SPSS.

The challenge is on the students side, they need to have adapted equipment (laptop, microphone, external camera and headphones) and must have "sufficient broadband speed and reliable connectivity to the

internet” (NCI, n.d.). Without the required technical tools, students will not be able to optimize their learning experience.

Another negative point is the proctoring programme used for online exams (RPNow) is not user-friendly, as 60% of the students feel that the technology used makes exams more difficult or unfair. Moreover 66.7% of the students would rather not do exams online and finally 73.3% of the students believe that the technological aspect of the course could be improved (Survey results in appendix 1).

## Policies

Specific policies are already in place regarding the online and blended classes. To ensure the student’s exam environment integrity, RPNow has been put in place, where students have their screen and audio recorded and must have a webcam recording their environment (NCI, p. 6). When it comes to written assessments to be submitted on Moodle, the Turnitin system is a service that prevents plagiarism and checks the authenticity of a work. Other policies apply such as attendance and engagement policy, students records are regulated under the data protection policies (NCI, p. 9) and finally it is required by the Programme Director to avoid sharing recordings.

## Internal Assets

Financially speaking, NCI sees a substantial growth each year leaving a surplus of EUR 1,490,776 at the end of 2018 (NCI, 2018) compared to EUR 662,966 in 2017, this represents a 125% increase from the previous year. In 2018, tangible assets were valued at over EUR 30 million and total reserves reach EUR 19 million. Therefore, we can conclude that the figures are showing good financial resources.

Another asset that plays in the college favour is its reputation and recognition. As developed in the SWOT analysis, the college has a good reputation for employability rate and keeps building relationship with companies looking for new talents with the latest industry skills. Thus, the accreditation and awards prove that the college is strongly recognized.

## External influences

External influences that have been defined in the competitive analysis and the current state are summarized in the figure 4.

Figure 4 : External Influences



## NCI Stakeholders

As each project has to involve all interested parties, a short description of the stakeholders has been made:

- Students = Customer
- Staff:
  - Support = End users
  - Security
  - Career = End users
  - Lecturers = End users
  - Administrators = End users
  - Program directors = Subject Matter Experts
- NCI Board of directors = Governing body and sponsor
- QQI (Quality Qualification Ireland) and other awarding bodies = Regulator
- Higher Education Authority = Regulator

## Future State

After having explored the competitive market and developed the current state of the college, the future state will help define the strategic goals and the scope of the change. In this part we use element from the SWOT analysis and a financial analysis to support our decision.

## Business Goals and Objectives

Goals and objectives are the purpose of the change that the organization wants to achieve (IIBA, 2015).

### Goal 1: To increase the number of enrolments and capacity

It was identified in the opportunities that there is an increase of the demand in terms of higher education, however the capacity of the college reaches its maximum. It was mentioned in the Irish Times article that NCI is looking to build a second campus and “take on 1500 new students in the short-term” (Power, 2017). It was highlighted in the weaknesses that NCI has only 6 online courses, then in order to accommodate more students, the college will have to expand its offer to a larger audience and consequently needs to increase the number of programmes offered online. The objective is to develop the current courses to an online mode of delivery and to add more programmes relevant to the industry demand.

### Goal 2: To become a leader in the online higher education studies in Ireland.

One of the weaknesses was the lack of popularity of NCI in the online education market. Griffith college started its blended programmes after NCI and yet is ahead in terms of online learning recognition. To be recognized as a leader in online learning, it is assumed that NCI must increase its visibility on the online education market and push forward the blended learning mode as Griffith college does.

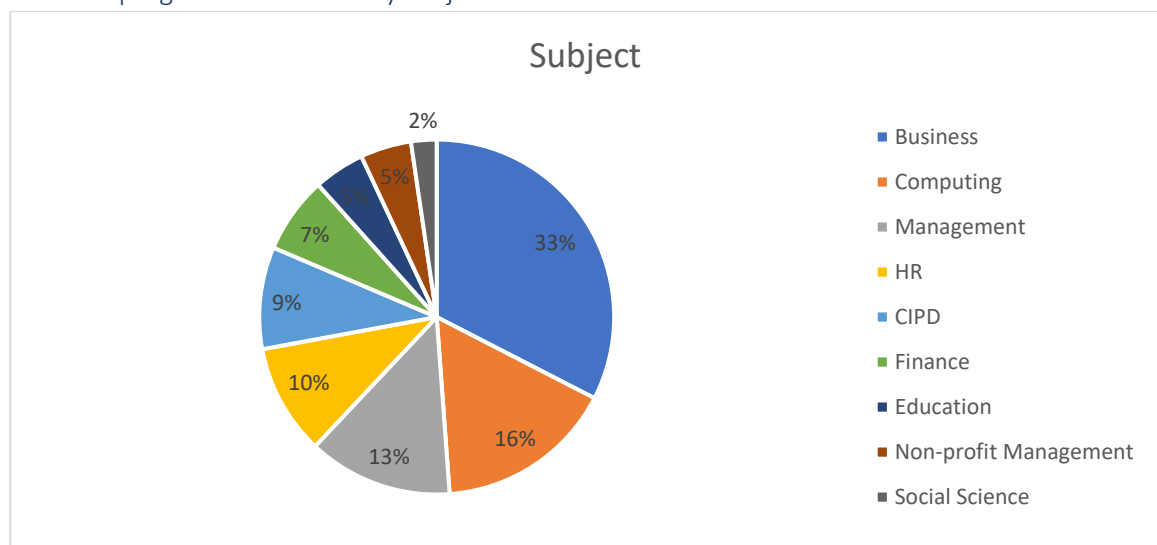
### Goal 3: Improve the quality of online experience

This goal is a focus on improving the overall online experience. As mentioned in the current state, certain aspects of technology used could be improved, from a cultural point of view there could be more social interaction and oversights of recording should be avoided.

## Scope

NCI is specialized in Business and Computing with nearly 50% of the programmes offered as we can observe on the chart in chart 1. Compared to other colleges, we can assume that NCI has a strategy of specialization in these two fields, therefore we do not suggest to increase the variety of courses to reach a wider audience, however we highly suggest to keep focusing on these two areas. It is also because, the two most profitable niches for online courses are “Computers and Technology” and “Business and Entrepreneurship” (Coursify.me, 2019)

Chart 1: Share of programmes offered by subject



(NCI, n.d.)

For NCI to achieve its goals such as increasing the number of online students, enhancing the online experience quality and be recognized as a leader in the online education industry in Ireland, we suggest the following options:

- Option 1: To stay with the same college but increase the online courses and put forward more blended learning.
  - In this case we would focus on product specialisation and move more business and computing classes online.
  - It opens possibilities for international and niche markets.
  
- Option 2: To continue with the same format and create a partnership with one of the substitutes online education platform such as Coursera or Edx.
  - It will increase visibility and reputation.
  - International students will be able to follow courses for free.

Developing a new online college is not in the scope, the justifications are developed on page 17 (Open NCI not a valuable option).

The options table (Table 2) summarizes the future state for each element as well as the potential risk for each suggested option.

Table 2: Options Table

	Option 2:  Partnership with an online education platform such as Coursera or edX	Option 1:  Same college with more online and blended courses options
Capabilities	<ul style="list-style-type: none"> <li>Expertise and knowledge from the online platform partner.</li> <li>Provides training and learning programmes for lecturer.</li> <li>Extra services such as marketing, technical and educational (edX, n.d.).</li> </ul>	<ul style="list-style-type: none"> <li>With more online courses, more lecturers will be trained in providing online lectures.</li> <li>Offering Bachelor and Master programmes online and recognized degree.</li> </ul>
Cultural/Social	<ul style="list-style-type: none"> <li>Courses will have to provide social interaction with students.</li> </ul>	<ul style="list-style-type: none"> <li>More interactions, quiz, and games.</li> <li>More tutorial or introduction video on student support services (e.g. how to make a search in the Library).</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>Higher capacity per class.</li> <li>Possibility to organize MOOC.</li> </ul>	<ul style="list-style-type: none"> <li>NCI has already the plan to build a second campus, this will be an opportunity to keep focusing on International students coming to Ireland.</li> <li>While NCI can target Irish residents for online courses.</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Support from online platform partner.</li> </ul>	<ul style="list-style-type: none"> <li>More licences to buy.</li> <li>Possible new Online Learning System such as Loop from DCU.</li> </ul>



<b>Value</b>	<ul style="list-style-type: none"> <li>• Increase visibility in Ireland and worldwide.</li> <li>• Increasing international students' enrolments.</li> <li>• Offers flexibility in the mode of learning.</li> </ul>	<ul style="list-style-type: none"> <li>• Providing a wider choice online creates value for students who do not have the means to physically attend college.</li> <li>• Programs adapted to profitable niches (Coursify.me, 2019).</li> <li>• With low fixed costs and more enrolment, the college can make economies of scale and increase profitability.</li> <li>• Cost saving, convenient and flexibility for students not having to commute.</li> </ul>
<b>Constraints</b>	<ul style="list-style-type: none"> <li>• Oversees students will not be able to benefit from NCI career network and relationship with local headquarters and tech companies.</li> <li>• With free online class, the college cannot count on additional income and students will not receive an official higher education degree.</li> </ul>	<ul style="list-style-type: none"> <li>• All goals cannot be reached in the short-term, time will become a constraint.</li> <li>• Another constraint is that if more courses are offered, there will be more lecturers to hire and most importantly to train them on the new tools and mode of delivering online courses.</li> </ul>
<b>Risks Assessments</b>	<ul style="list-style-type: none"> <li>• Risk of becoming MOOC and loose in quality due to un-personalized classes.</li> <li>• Will not necessarily improve current online quality experience.</li> <li>• Risk of not attracting overseas students who wanted to benefit from the direct connexion with businesses and Dublin headquarters.</li> </ul>	<ul style="list-style-type: none"> <li>• Due to the lack of physical interaction and involvement, there is a risk of students being disconnected and dropping out online courses. Average drop out rate is 15% over the past three years (See table appendix 3).</li> <li>• Risk of student cheating using unknown techniques.</li> <li>• Risk of learning material and recording being shared outside NCI.</li> <li>• There is also a risk of sudden competition increase with all colleges wanting to develop their online offers (following COVID-19 restrictions).</li> </ul>

## Open NCI not a valuable option

If the option of developing a new online college has not been selected, it is because it will not bring financial value for now and is not worth creating a separate brand. This part analyses the weight of the students who opted for online delivery. The table 3 shows the difference between online students and international students.

In the year 2017/2018, 80 students enrolled in online courses, which represents almost 1.5% of the total students. When calculating the average fee for online courses we found an average of EUR 3,000, therefore we can assume that the approximate income for online courses in 2018 is EUR 240,000 which represents nearly 1% of NCI total income. When we compare this ratio to international students which share of income reaches 21%, the suggestion would be to continue focusing on this market.

Table 3: Financial Analysis

Year 2017-2018	Total	Online students	International students
Quantity of students	5416 (NCI, 2018)	80*	700 (NCI, 2018)
Percentage	100%	1.5%	13%
Avg. fees/student (EUR)		3,000	8,571
Share of income	100%	0.84%	21% (NCI, 2018)
Income (EUR)	28,380,150 (NCI, 2018)	240,000	5,959,832

\*Data provided by the registrar of NCI (see appendix 3)

## Change Strategy

### Solution Scope

After having analysed the current situation and the future state of NCI and considering the risks. We have suggested two strategies and evaluated the different elements that lead us to select the most appropriate strategy.

Partnering with an online education platform is an alternative option that can be used but will not be valuable in terms of revenue especially if the courses are free. Also, this option will not meet the goals of improving online courses quality and for NCI to become an Irish leader in online higher education.

The recommended strategy is to continue delivering and developing more online/blended courses with specializing on the skills required by growing industries such as computing and business. Therefore, to see if the strategic goals are achievable, a gap analysis has been made.

### Gap Analysis

The gap analysis has the purpose of assessing the difference between the future state and the current state of an organization (Wright, 2019). To find out the gaps to be filled and for NCI to reach the strategic target, we used the goals defined in the future state and looked at NCI current situation. This provided us with the gaps that are summarized in the table 4.

Table 4: Gap Analysis

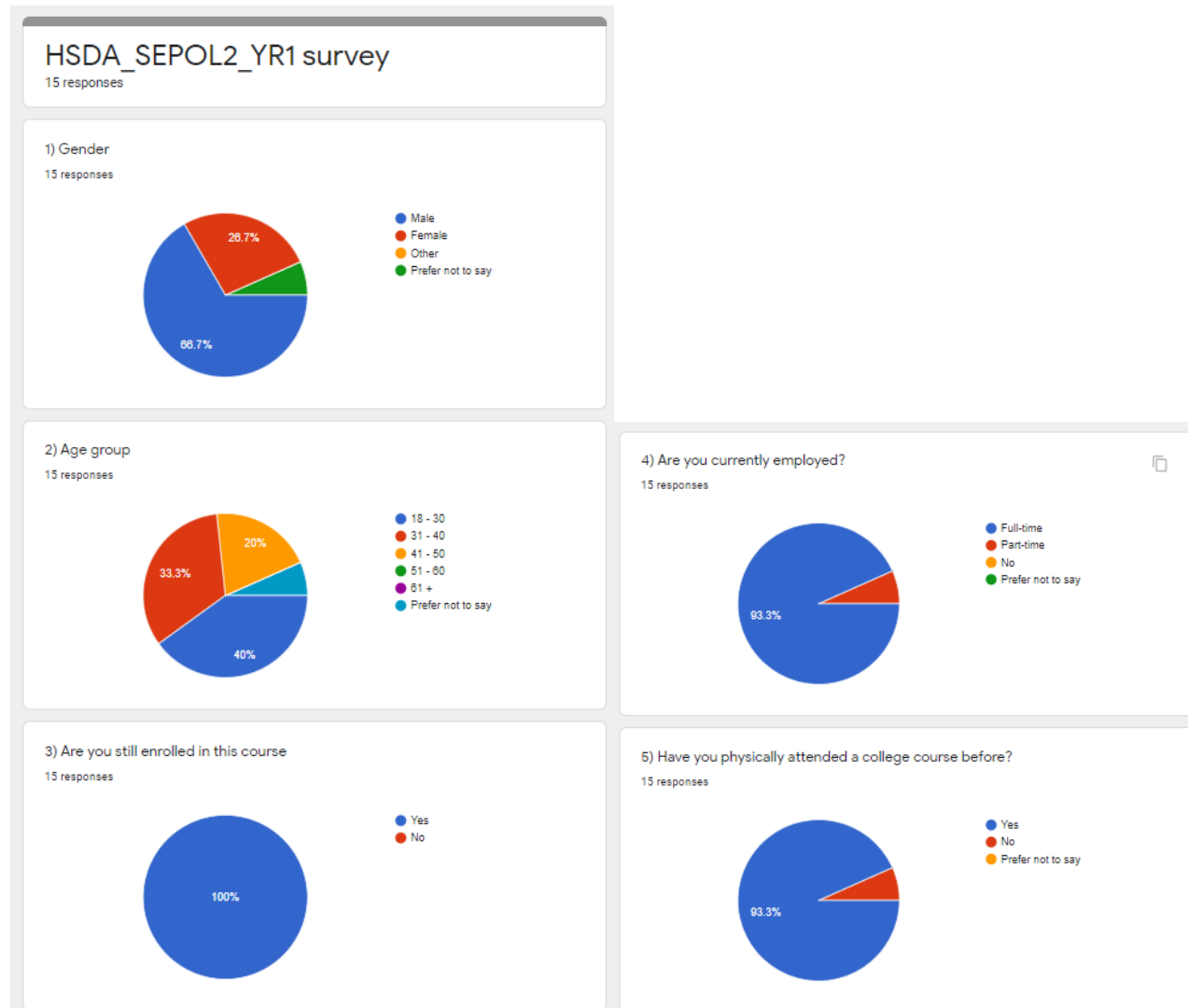
Goals	Gap Analysis			
	Focus Areas	Desired Future State	Current State	Gap
Increasing capacity and enrolments	Organizational structure	<ul style="list-style-type: none"> <li>Increased number of enrolments of online students by 24% per year→ 115 online students for September intake 2020 (Estimation in appendix 4)</li> </ul>	<ul style="list-style-type: none"> <li>Currently 81 students (appendix 3)</li> </ul>	<ul style="list-style-type: none"> <li>Increase of 34 students</li> </ul>
	Staff competencies and training	<ul style="list-style-type: none"> <li>Increased number of lecturers delivering online classes</li> </ul>	<ul style="list-style-type: none"> <li>Defining current amount of lecturer able to deliver online classes</li> </ul>	<ul style="list-style-type: none"> <li>Hiring more lecturers</li> <li>Training current lecturers on how to use online teaching methods</li> </ul>
	Facilities	<ul style="list-style-type: none"> <li>All resources to be moved online</li> </ul>	<ul style="list-style-type: none"> <li>Currently not all library books are available online</li> </ul>	<ul style="list-style-type: none"> <li>Increase the amount of E-books</li> </ul>
	Technology infrastructure	<ul style="list-style-type: none"> <li>Increase de number of licences</li> </ul>	<ul style="list-style-type: none"> <li>Defining current amount of licences</li> </ul>	<ul style="list-style-type: none"> <li>Purchase of licences, can cost EUR 3000 for a licence for 200 students</li> </ul>
Being recognized as the leader in the online higher education studies in Ireland	Recognition & Accreditation	<ul style="list-style-type: none"> <li>Win diverse "Online Education Awards"</li> <li>QQI Accreditation for all new online courses</li> </ul>	<ul style="list-style-type: none"> <li>Currently awarded for the support activities (c.f. SWOT analysis) but no rewards related to online teaching</li> <li>Currently 4 online programmes out of 6 have been accredited with QQI</li> </ul>	<ul style="list-style-type: none"> <li>By increasing the number of online classes and developing more online presence.</li> <li>By changing the teaching mode to online, a certain number of programmes will have to go through a QQI revalidation process</li> </ul>
Improve the quality of the online experience	Cultural and Social aspects	<ul style="list-style-type: none"> <li>Better support</li> <li>Better interaction</li> </ul>	<ul style="list-style-type: none"> <li>Currently not enough interaction and practical examples to help students understand (Survey results appendix 1)</li> </ul>	<ul style="list-style-type: none"> <li>Online education tutor as they do in Dublin City University ( DCU, n.d.)</li> <li>Improving interaction via games, quizzes</li> </ul>
	Student satisfaction	<ul style="list-style-type: none"> <li>Dropout rate 5%</li> </ul>	<ul style="list-style-type: none"> <li>Current average dropout rate 15%</li> </ul>	<ul style="list-style-type: none"> <li>Decreasing dropout rate by 10%</li> </ul>
	Technology	<ul style="list-style-type: none"> <li>Improving online exams experience</li> </ul>	<ul style="list-style-type: none"> <li>RPNOW software not satisfactory</li> </ul>	<ul style="list-style-type: none"> <li>Switch to another proctoring programme</li> </ul>

## Conclusion

After having analysed the competition and NCI current state, we have defined the scope of the solution and assessed the risk to suggest a change that will help the college reach its goals. The purpose of this strategic analysis was to define whether NCI should develop an online college. With the report findings and rationale obtained, we found that the option is to keep developing online courses and blended learning to give students more flexibility. We suggest targeting specific audience or niche markets that would benefit from this flexibility such as busy professionals, parents, distant students, students with a low economic situation and enterprises looking to sponsor their employees. Nevertheless, international students also represent an important share of revenue, and to try to accommodate them and respect the distancing measures, we could suggest targeting blended learning to this market. Of course, a more detailed analysis can be done to study this tactic.

# Appendices

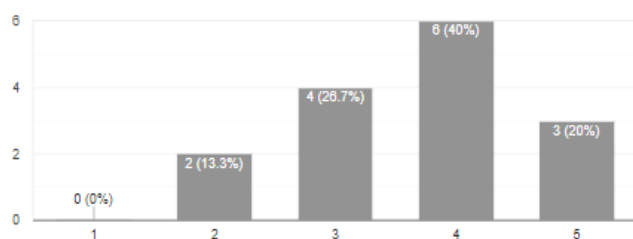
## Appendix 1: Online Students Survey



## Opinions

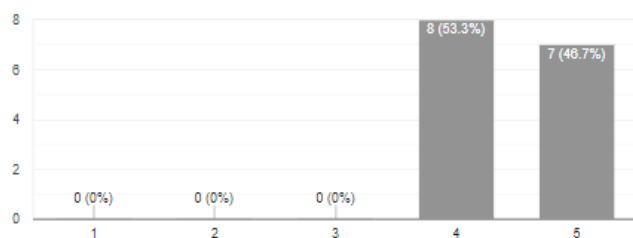
1) I prefer the online mode of learning than physically attending a course

15 responses



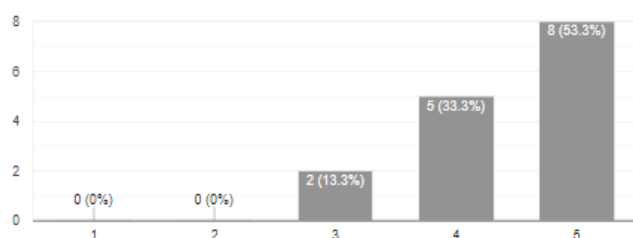
2) I like the convenience that online learning provides over physically attending a college

15 responses



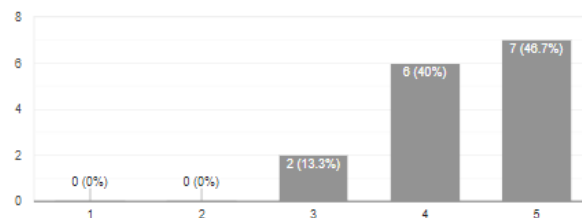
3) I would recommend online learning to others

15 responses



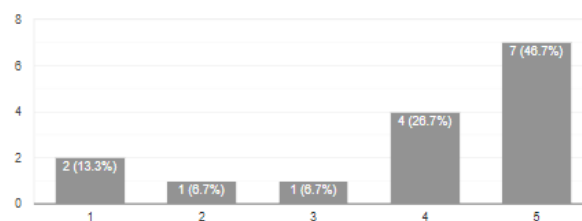
4) Attending a course online helps me save money

15 responses



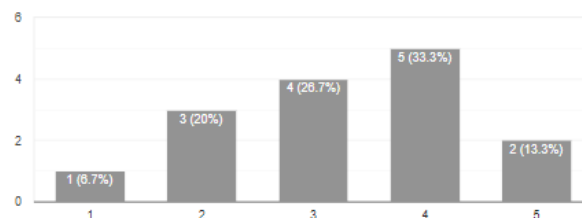
5) I would not be able to do a course like this unless it was online

15 responses



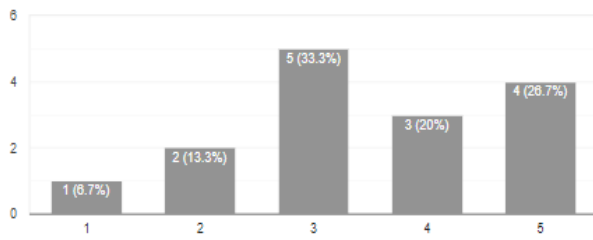
6) I feel that I absorb information better in a physical lecture setting

15 responses



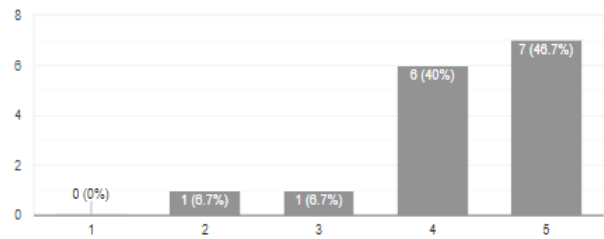
7) I feel that the social aspect of physically attending a college is something I am missing out on

15 responses



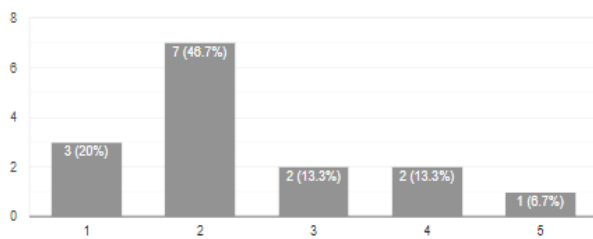
10) I find the software for connecting to classes easy to use

15 responses



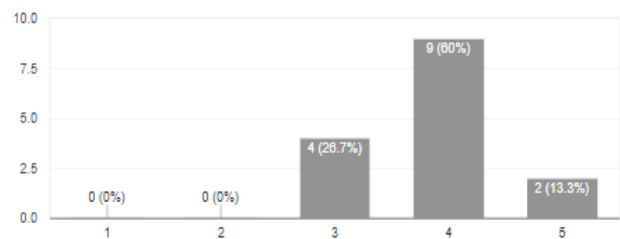
8) I prefer doing the exams online

15 responses



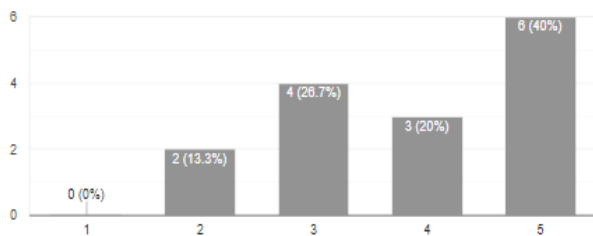
11) I feel that the technological aspects of the course could be improved

15 responses



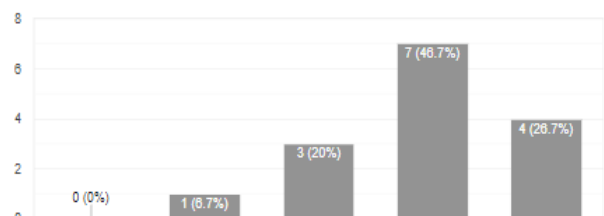
9) I feel like the technology we use makes exams more difficult or unfair

15 responses



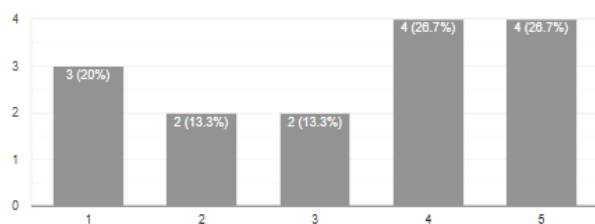
12) I feel that working and attending this course at the same time is difficult to manage

15 responses



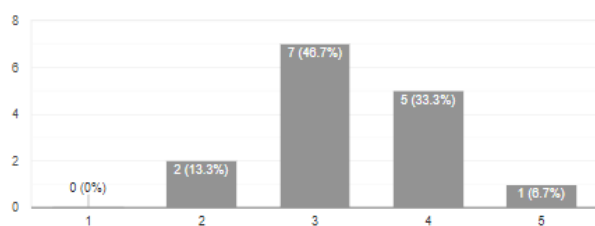
13) I have seriously considered dropping out of this course at least once

15 responses



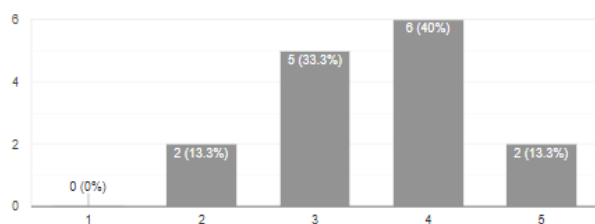
14) I find that communicating with lecturers and other staff members easy and efficient

15 responses



15) I find that collaborating with other students is easy to achieve online

15 responses



16) Is there anything you can think of that could be done to improve how NCI delivers online learning?

8 responses

- Make sure online lectures are being recorded
- Explaining the subjects with practical examples to understand concepts instead of More Theoretical. Theoretical explanation are difficult to understand.
- RPNOW exams could've been more user-friendly
- Access to lectures via phone or ipad
- Physical Meetup and introduction at start of the year
- Have video tutorials such as how to search library, how to find past exam paper that could be played when needed. For online exams, acknowledge that the technology doesn't allow for easy tabbing between calculator, exam paper and answer sheet and give time to compensate this.
- Improve the exam software
- more student engagement ex. using more breakout sessions and split by group



## Appendix 2: Interviews

### Interview 1

Online studies question with a female Student of 35 years old who studied in accounting (ACCA) via online lecture:

#### **Information about the course**

Accountancy school.IE- BPP Book, Caplan - 5 lad lane Dublin → CFI online recordings, can't ask questions, but was offering support, physical class available, travelling time. Live streaming, interact on chat. Cheaper for online students

Questions:

**1. What do you think of the online studies?**

It was very good and very practical especially for me who is working full-time and does not want to waste time commuting.

**2. What are the benefits from studying online?**

Confort from home, cost, time to commute, money for transport/drive, car park expansion.

**3. What are the reasons why you would choose a college/university over another?**

The course itself which is ACCA and is approved, recommended, BPP, for the lecturer, people who work there.

**4. Do you think that it is a benefit for a college to offer the online course alternative?**

Capacity physical space, competition to be accepted

Limited capacity

Risk of people duplicating recordings, sharing to other people → how can they check?

Recording disappeared after the exam

**5. What do you think of the social aspect of following an online course?**

Even on class you would not build much relationship, lots of students

**6. What do you think of online exams?**

Exams in Croke park, convention center, → NOT ONLINE exams

**7. What software did you use to attend classes?**

Live streaming was on the website and there is a link, Adobe Connect, Moodle

**8. Do you think that the technology aspect of online class could be improved? If yes, how?**

Ipad, problem accessing the class, support service.

**9. How do you find to attend a course and work at the same time? Did you study part-time?**

Part-time course, it's manageable, there is a lot to do, reading, after work you still have to study, full day class in the weekend.

**10. Do you prefer online mode of learning than physically attending a course?**

Physically attend → to be able to see and talk to people

Because of limitation (work, distance, travelling time) → Online - just for part-time

**12. Would you recommend online learning to others?**

Yes I would recommend, you need a teacher to explain

**13. When you were doing your online studies, would you be able to do a course like this unless it was online?**

I would have to go the school, but I will have to make sure to arrive early to have a good place

Some people have kids so they could not go to class

It's good to have the physical option though

## Interview 2

Male student of 33 years old employed full-time who studies Higher diploma in data analytics at NCI in class, part-time and had to start following classes online due to the pandemic.

**1. What do you think of the online classes?**

I prefer in-class studies but studying online offers some benefits such as not needing to commute, attend the classes even if you don't feel well...But I miss some parts of the interpersonal communication with the lecturer and other students

**2. In your opinion, what are the benefits of attending online courses?**

One huge benefit is, in case the lesson is recorded, the ability to review the explanation of the most difficult topics.

**3. What do you think of the technology aspect of the online delivering mode?**

There are several methods online (Adobe, Teams...) each of them with pros and cons, but all of them help somehow to carry on with the activities we were doing for the whole year and make people able to attend no matter the distance.

**4. What are the reasons why you would choose a college over another?**

Among several reasons, I'd highlight the student portal and how easy is for them to find all the needed info

**5. How do you absorb information during an online class compared to physical class?**

I try to follow the lecturer's explanation in the same way and ask if I don't understand something. Maybe in the online version, before I ask I google it quickly to see if I can find the answer quickly

**6. What software do/did you use to attend online classes?**

Adobe and Teams

**7. How do you find to attend a course and work at the same time?**

Difficult for both online and in-class

**8. Do you prefer to attend class physically or the online learning mode? Why?**

I prefer to attend physically because that way I have more present the feeling of "obligation"

**9. Would you recommend online learning to others?**

Yes, if they have discipline enough is an excellent method.

Appendix 3: Online student data

Academic Year	Reg 1 month after	Reg start Semester 2	Drop out %
2019	93	81	13%
2018	75	67	11%
2017	80	62	23%
		<b>Average</b>	<b>15%</b>
		<b>Median</b>	<b>13%</b>

Data provided by the registrar of NCI – John McGarrigle

Appendix 4: Estimation forecasted enrolments

Academic Year	Reg 1 month after	Progression in %	Reg start Semester 2	Drop out %
Forecast 2021*	143	24%		
Forecast 2020*	115	24%		
2019	93	24%	81	13%
2018	75	-6%	67	11%
2017	80		62	23%
			<b>Average</b>	<b>15%</b>
			<b>Median</b>	<b>13%</b>

## Annexe 5: Mindmap

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