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Layoffs have become routine in companies across sectors. Thus landing a secure job with the potential to grow may be challenging. How can students, who are fairly new to employment, navigate their way around the obstacles that have made the job market highly unpredictable? There are five check-boxes to tick off while narrowing in on an organisation that could give fresh graduates the opportunity to begin their careers.

#### Research from different perspectives

**Potential risk surrounding a sector/industry:** When there is a recessionary trend, sectors that cater to luxury goods and high-end services are at risk of closing down or increasing layoffs. This is a direct result of the reduced spending power of people in general. It is essential for students to study and analyse the in-

# Launch your career

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dustry before selecting a company in that sector. The major advantage of sectors such as food, education, and health industries is their insulation against recessions.

**Company's current health:** A prospective employee should identify the company's present growth stage. The following questions will guide one in understanding the health of

an organisation: Is it a start-up with a new product or service? Does it have an established product with increasing sales? Is the company agile enough to overcome the

challenges expected during uncertain economic conditions? Is the company transparent about its policies? Does the company have a clear mission, vision, and goal?

**Media Coverage:** Today it is not the lack of information but the ability to access the right information that is the challenge. Students should find answers to key questions about

the organisation from print or social media: Has the share price of the company dropped dramatically? Has the company defaulted on its creditors or suppliers? Has any negative news been published about the company?

#### Grow the network

Networking is the most reliable and effective means to land a sustainable job in uncertain conditions. It allows the person to connect with people from different industries and gain insights into various career paths; to build relationships with professionals who can offer valuable advice on how to navigate the job market successfully and provides opportunities to showcase one's skills and strengths, which could align with a job opening at an organization.

#### Check company websites

When it comes to job hunting, students often stick to a few job sites. This res-

tricts the information on opportunities available in a particular sector. First, identify a target sector for employment based on qualifications and skills. Then list the top 10 companies (based on criteria such as share price, revenue, and profits) in the sector. Then send in the applications. Companies generally have opportunities listed on the company websites that students can respond to. They can also send applications to the HR department's email address mentioned on the careers page.

#### Strong resume/cover letter

The resume and cover letter are the first impression a student will make on a potential employer. It's important to tailor the resume and cover letter for each position, highlighting relevant skills and experiences. A resume should be clear, concise, and easy to read. Use bullet points rather than long para-

graphs to highlight educational achievements. A cover letter is an excellent opportunity to showcase the applicant's personality and passion. This should be well-written, error-free, and tailored specifically to the job description.

#### Upskilling

Internships and online learning are two great ways to prepare students for their first job and enhance skills that are in demand currently. Other soft skills such as communication, problem-solving, teamwork, time management and so on can be improved during this time. Internships also provide the students with the opportunity to gain practical experience in the real world, while allowing them to network with professionals in their field of interest.

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## Flying high

What it took to design an award-winning aeroplane at the Boeing National Aeromodelling Competition South Zone

Amal Kakade and Siddharth Nair

Most people have a niche area in their work or a hobby they excel in; something that makes them feel alive. For us, it was a love for aeroplanes and the Boeing National Aeromodelling Competition South Zone was a chance to prove ourselves.

The competition – organised by Boeing and the IITs at Kanpur, Kharagpur, Bombay and Madras – tested students' ability to design the lightest possible aeroplane capable of carrying the most weight. The goal, therefore, became aerodynamic efficiency and engineering superiority. It was also a test of piloting skills; countless planes looked more impressive than ours but crashed in turbulent conditions because they were not handled well.

Apart from the two of us (Kakade was the captain and in charge of simulation modelling and optimisation and Nair was Chief of Design, responsible for the aerodynamic performance), the other two members were Nikhil Kapil, Chief of Avionic Systems, handling electronics; and Om Panchal, our lead pilot, who over saw Flight Dynamics.

#### Designing the plane

Preparing for this competition took over our lives. Siddharth's windows were covered in equations and diagrams and cleaning them was strictly forbidden, Om's garage was overflowing with crashed proto-

types and materials for the next one. Endless amounts of coffee-fuelled discussions consumed our days. These are certainly the best memories of our college days.

What separated our team from our competitors was our approach to designing at the very limit of what would fly. We spent countless hours in the workshop evaluating different design concepts and the trade-offs associated with each one, as every part of the aeroplane was purpose-built from scratch and optimised for aerodynamic performance.

We used cutting-edge structural optimisation and aerodynamic simulation software along with advanced manufacturing techniques such as 3D-printing to shave off every gram possible.

A key factor in our success was choosing the right materials. The design needed something lightweight but sturdy, and finding these involved searching every fathomable corner of Mumbai, from tiny shops in Crawford Market to remote factories beyond Kalyan. We eventually settled on a combination of lightweight Depron biofoam and carbon fibre. The first provided the bulk of the structural strength, while the latter added stiffness and stability.

#### The competition

The competition was held over two days, during which all teams had to drop their payload – as many golf balls as your plane can carry – into a dedicated zone and then land the plane in the landing area.

The team with the highest ratio of payload carried to the weight of the plane would be the winner.

Every day, the team got two attempts to fly. On the first flight of the final day, one of our components blew up due to overheating and the plane nose-dived straight to the ground. With some quick thinking, our pilot saved it, limiting a possibly catastrophic crash to a possibly repairable one, with one hour to go before our second and final attempt.

We rushed to work and got the plane ready to go with a few minutes left before the deadline. It was held together entirely with tape, glue, and extra waste bits of carbon fibre. The wind conditions got worse, as the day progressed, and plane after plane crashed with resounding cracks and thuds, putting a disheartening end to months of work. It only needed one strong gust of wind and one wrong input from the pilot. Of the 83 teams that participated, 20 got to the finals. And only eight dropped the payload successfully and landed.

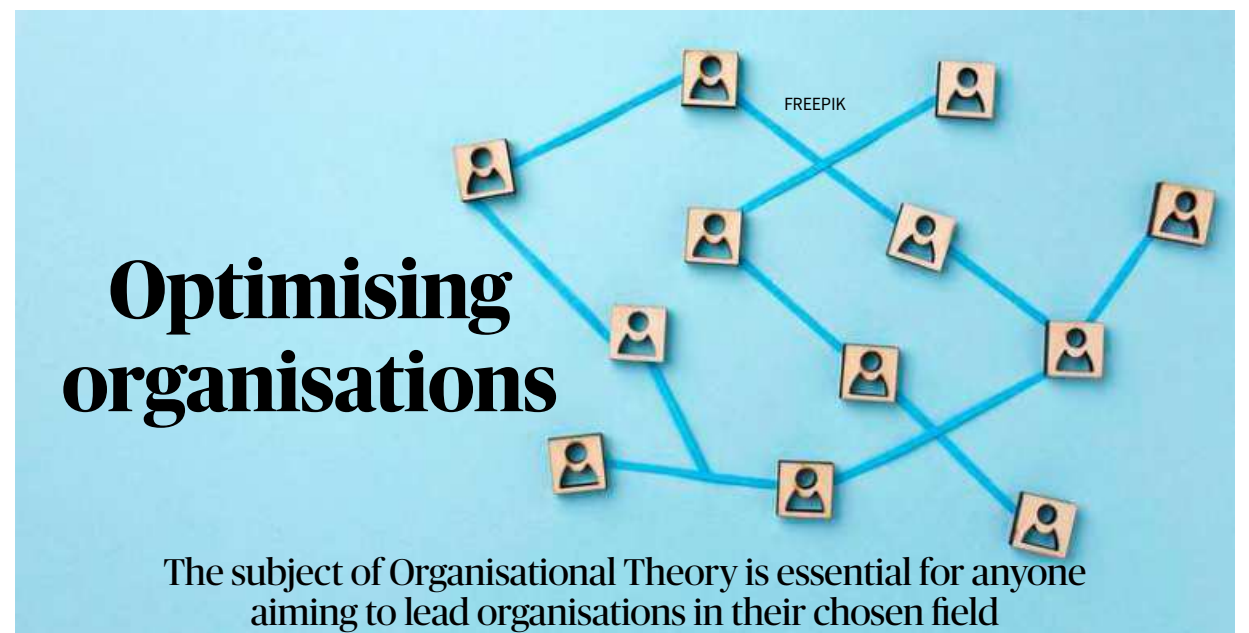
When our time came, our plucky little plane flew straight as an arrow. Despite the precarious reinforcements, our design was sound and our Maths correct. In the end, the countless hours we had put in was worth it. As we move on to greater challenges, the experience of this competition will always stay with us.

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Eric Knight

Management students are destined to be the next generation of business managers. Whether they are undergraduates, Masters or MBA students, the ability to lead organisations and build teams are key elements that organisations look for. For some, the ability to manage large teams comes from experience. One truly appreciates management lessons when having to lead a major restructure or reorganise a business. However, management is already an applied field, which takes insights from Sociology, Engineering, and even Philosophy to guide students toward success. As Aristotle once said, "Practical wisdom depends as much on practice as it does on scholarship". Both are necessary to guide action and build the all-round capabilities we respect in organisational leaders.

It is in this context that Organisational Theory becomes a relevant field of study for business school students, and management students in particular. Over the past few decades, Organisational Theory has emerged as a scholarly field defining the constructs and concepts necessary to administer organisations. In the early 20th century, theories of the organisation stemmed from sociologists like Max Weber, Emile Durkheim and Frederick Winslow Taylor.



Their models were built around the organisation as efficient, structured, and organised, with a symmetrical form and a regular rhythm.

#### Evolving models

While these still apply to some degree today, the contexts in which organisations operate are far more complex. For example, organisations now need to manage their incumbent business while supporting entrepreneurial activity to attack new market opportunities. This has given rise to the theory of the 'ambidextrous organisation' or the ability to do two things at once. Management students learn many models for how to structure organisations to achieve these twin goals simultaneously under a similar (and different) executive leadership team.

In addition, disruption to business models has introduced the notion not simply of strategy, but also design-led and open strategy. These provide inputs into the strategy of organisations that extend beyond the boardroom: in-depth customer insights, qualitative surveys with key stakeholders, and entering new markets in partnerships with other players in your supply chain. It is not always the case that organisations are best served by building it themselves.

Future managers, therefore, need to study Organisational Theory in order to have relevant constructs and concepts to inform their future experience. They can get these constructs through an MBA programme.

Otherwise, they can do a Bachelor of Commerce or Bachelor of Business

degree and take majors in fields like Management, Strategy, Innovation and Entrepreneurship, or International Business. Each will take a slightly different focus. For example, Management will tend to skew toward Human Resources and people-related subjects. Strategy, Innovation and Entrepreneurship will focus on business model innovation and strategic planning, and International Business will focus on how to build teams that traverse multiple regions.

These studies can be well-complemented by internships or work placements that situate students within business units, in customer-service teams, or in the strategy offices of organisations. Over time, students will either specialise in a cross-function like Strategy, Hu-

man Resources, or even Marketing, or they will work within a business where they will be responsible for operations and delivery.

A final piece of career advice for Management students. Leading organisations is a difficult job. As you rise to leadership positions, you will come to learn that success depends as much on what you do as on what you can inspire in others.

Therefore, the ability to work with people and help them understand their business environment is crucial to long-term organisational success.

Organisational Theory is well placed to teach students the key elements of how that success is possible.

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## Create those special effects

With VFX and Animation becoming increasingly popular across education and entertainment, the need for skilled professionals is rising exponentially

Merzin Tavaria

Over the past couple of decades, the animation and VFX industry has evolved considerably in India and worldwide. With VFX being increasingly used in the entertainment industry and education, the demand for skilled professionals has quadrupled and businesses are constantly seeking new talent. VFX can safely supersede dangerous elements like stunts, explosions, and crashes and provide a better viewing experience for audiences while allowing directors and artists to exercise their visual imagination. However, the industry is fiercely competitive

and, therefore, one needs to select an appropriate institution to pursue a course and secure a job as a VFX artist. Also, there is definitely a need for more formal courses to be created with a defined syllabus and engagement with VFX companies for practical exposure and the right upskilling. Nonetheless, behind the industry's phenomenal growth is the proliferation of aspirants who have mastered the art of creating original and innovative stories.

Being a VFX artist is more tempting than before, as neither a university degree nor academic drawing and painting coaching is required to "simply create". Additionally, digital artists en-

joy the luxury of freelancing and working remotely more than other professionals. Conversely, the desire to join a major production studio to work on a new animated film or fantasy series is too appealing to pass up the opportunity.

#### Required skills

Staying abreast of the latest VFX software and continuing to develop as an artist, one can cultivate some less-known skills to get a job and remain in demand. Character design, audio-video editing, rotoscoping, match-moving techniques, compositing, pre-visualization, and VFX filmmaking are complex concepts that a student is introduced to at a higher level. Many stu-



dents are increasingly choosing animation and VFX career opportunities. Visual media is the most popular medium for VFX companies to create a parallel universe. 3D Animation and VFX courses cover conventional art, the game art production pipeline, 3D modelling, digital sculpting, texturing, rigging, animation, and particle dynamics. Animation and VFX graduates can work as 3D animators, level designers, lighting and texturing artists, and CHF dynamics artists. A candidate looking to pursue a

career in this field can begin with B.Sc. Animation

The Government of India's AVGC Promotion Task Force has underlined the significance of this industry and its contribution to the economy. It intends to establish a national curricular framework in the AVGC sector and enable skill development, which will improve training quality. The draft policy concentrates on content creation in India with the assistance of the National AVGC-XR Mission.

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