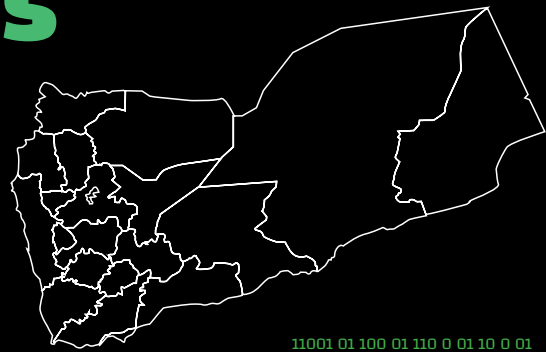


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# State of Yemen Tech Startups 2020 Survey



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Co-funded by  
the European Union



## About ROWAD

**ROWAD** was founded in 2013 in Sana'a, Yemen, by Yemeni entrepreneurs who dedicated their efforts to engage Yemeni entrepreneurs and local actors in a constructive way to support the emergence of a vibrant Entrepreneurship Ecosystem in Yemen. Since then, ROWAD prospered as one of the most active and effective organizations working in entrepreneurship and private sector development in Yemen. While ROWAD was started in Sanaa, it operates out of four hubs on the ground in Mukalla, Mareb, Taiz, and Sanaa, and its activities cover the whole country. ROWAD believes in Yemeni youth ability to develop innovative solution to address local, regional, and global challenges, and it is focused on developing the channels for them to do so.



## About ROWAD Coding Academy

**ROWAD Coding Academy** is a launchpad for a new generation of tech-skilled youth who are ready to compete globally. At the academy, we combine an up-to-date curriculum and a vibrant learning environment to nurture the best qualities of our trainees and help them to enhance their skills. The academy has a market-oriented approach; thus, it continuously modifies its courses and teaching methodologies to address market needs.

## ROWAD City-Hubs

## About ROWAD City-Hubs

**ROWAD City-Hubs**, currently in Mukalla, Mareb, Taiz, and Sana'a, work at the local level to support the development of startup communities at the city and governorate level. ROWAD City-Hubs engage the various stakeholders in the community to support the entrepreneurship ecosystem, and they offer training in entrepreneurship, employment, and coding, as well as educational seminars and events.

# Background

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Yemen has over 8 million Internet users and over 17.82 million Mobile Phone users as of 2020. Despite this, leveraging technology to address local needs and provide services locally and internationally remains a limited activity; the pioneers in the tech startup scene in Yemen are paving the way for all those that will come after them.

While Yemen has been going through a conflict for over six years now, Yemeni youth are not waiting for an end to conflict to start participating in the 4th Industrial Revolution. To the contrary, aspiring Yemeni entrepreneurs are capitalizing on technology and the Internet to bypass the confining realities of their environment and engage with the world directly, and to deliver services locally, albeit in a limited manner.

Since its establishment in 2013, ROWAD has been promoting innovation and the use of technology as new tools for development, along with a deep understanding of challenges facing society. ROWAD has run a series of national business competitions over the years to support

local innovators. In 2020, ROWAD ran the Yemen Entrepreneurship Cup to engage Yemeni youth through its hubs in Mukalla, Mareb, Taiz, and Sana'a to develop innovative solutions address local market needs. In response to COVID-19, ROWAD and partners organized the Yemen Hackathon with a focus on engaging Yemeni entrepreneurs, innovators, technologists, and health experts inside and outside the country to collaborate to help address the critical needs of the country. Realizing the need for upskilling local tech talent, ROWAD established ROWAD Coding Academy, which provides intensive and specialized programming bootcamps to Yemeni youth.

This annual survey is another initiative from ROWAD to develop a clearer understanding of the opportunities and challenges facing tech startups in Yemen. It aims to provide a platform to collaborate and support the sector, by engaging all tech startups in a conversation about the challenges and opportunities they perceive, and what kind of a collaborative action is needed to unlock the whole sector.

# Methodology and Participating Companies

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Over the last few months, ROWAD Coding Academy worked on building a database of local tech startups to better understand their needs and to connect them with talent. The Academy team reached out to 220 tech companies and startups around Yemen, relying on the ROWAD network and a local Yemeni app called Dalil Alyemen, an electronic Yellow Pages with contact information for Yemeni businesses and NGOs across the country. Out of the 220 tech startups we contacted, 68 fully participated in this exercise. The companies were asked to

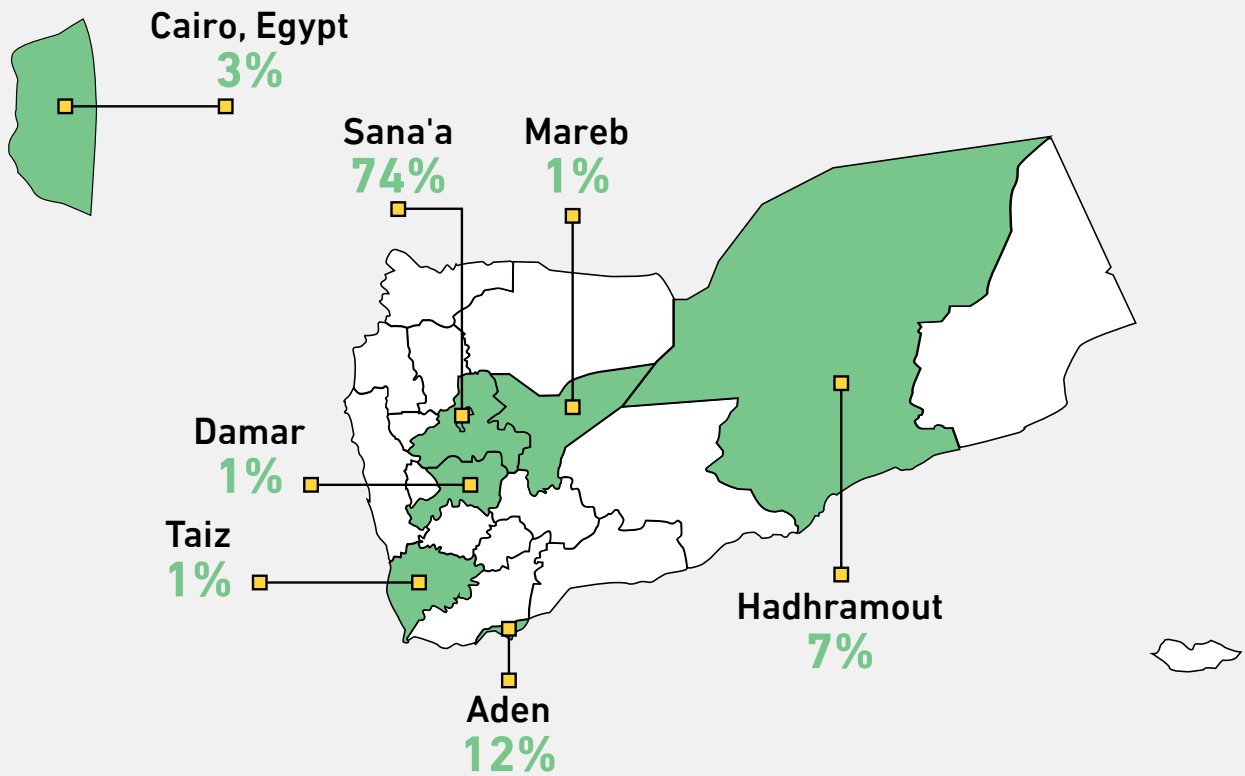
share information about their founders, teams, finance, current status, perceived challenges, their talent needs, and future plans.

Most participating tech companies were from Sana'a (74%), followed by Aden (12%), Hadhramout (7%), Dhamar (1%), Mareb (1%) and Taiz (1%). The participating tech companies and startups were mostly founded within the last five years (61%). About 3% of participants are Yemeni startups operating out of Cairo, Egypt.

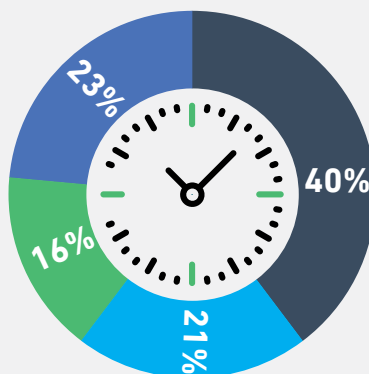
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## Main office of Participants



## Years of Operation



- Less Than 2 Years
- 3 - 5 Years
- 6 - 10 Years
- More than 10 Years

Participating companies will receive ongoing communication from ROWAD Coding Academy about opportunities, connections with talent, and engagement with our programs.

# Founders

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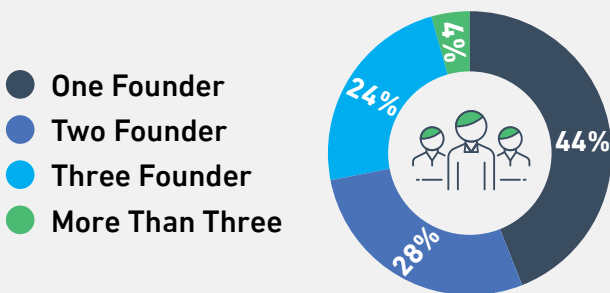
The survey shows that a substantial portion of tech startups in Yemen are formed by sole founders, with 44% launched by a single founder, while startups with teams of more than three are rare. Only 6% of all startups were founded by female entrepreneurs, however the majority of the tech startups have at least one female staff, with female staff comprising 31% of all staff in the tech startups surveyed. The establishment of tech startups by female founders is a recent

phenomenon, with those that participated in our survey starting as recently as 2018.

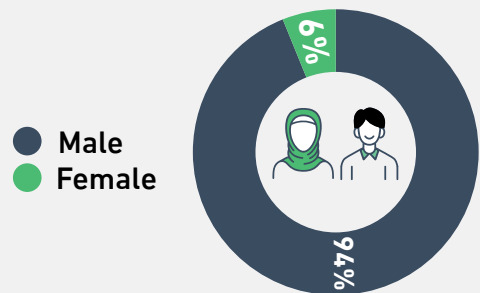
Many Yemenis entrepreneurs are young, starting their tech startups as young as 16 years old, with 11% of founders surveyed below the age of 20.

The majority started their businesses during their college years or right after graduation (32% aged 20 - 25).

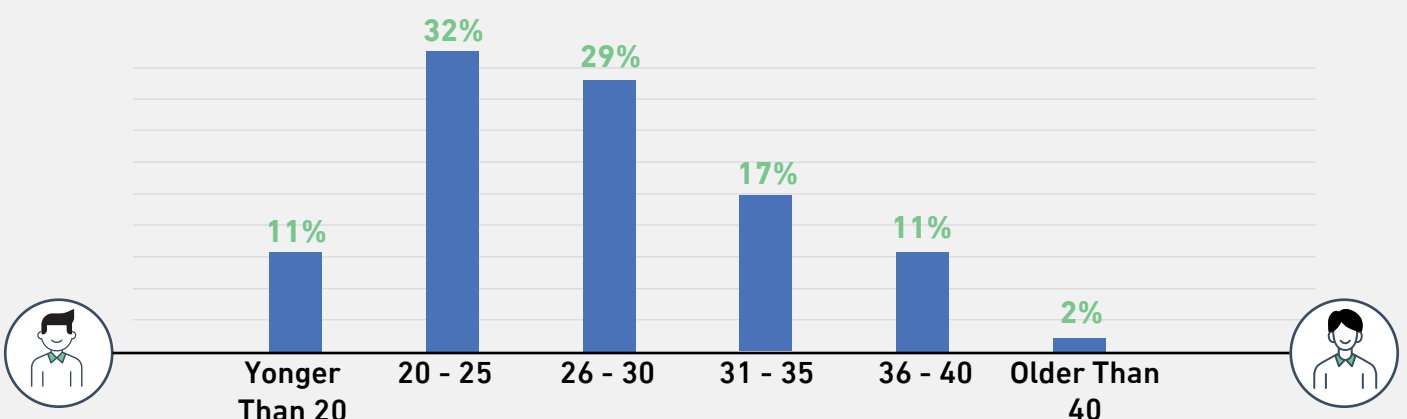
Number of Founders



Gender of Founders



Age At Founding Startup



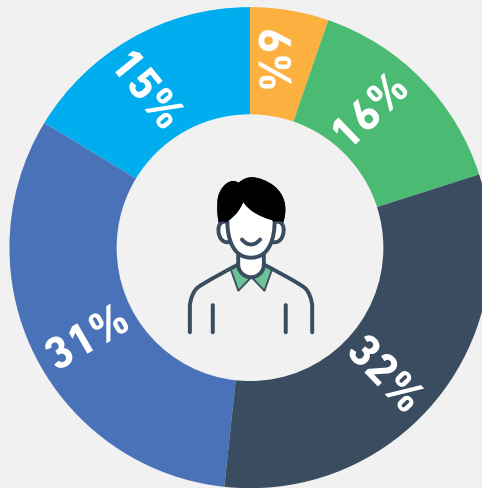
# Team

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The tech startup teams mainly consisted of 3 to 10 members (63%), with only 6% having larger teams of more than 20 staff. While 69% have at least one female team member, 31% of tech

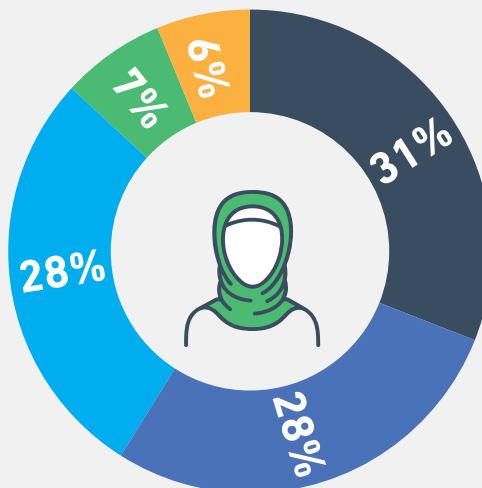
startups in Yemen have no female members and only 15% have more than 50% females. Among participants, 6% were all female tech-startups.

Number of Staff



- 1 - 2 People
- 3 - 5 People
- 6 - 10 People
- 11 - 20 People
- > 20 People

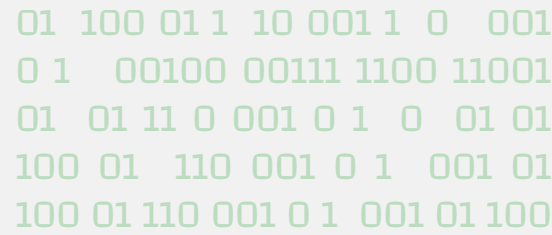
Number of Female Staff



- 0
- 1 - 2 Female Staff
- 3 - 5 Female Staff
- 6 - 10 Female Staff
- > 10 Female Staff



# Sectors and Geography



The majority of Yemeni tech startups are agencies providing web and mobile app development services, with few of them focused on developing solutions for a specific sector (e.g. education, health, logistics, etc.). Yemeni entrepreneurs could create opportunities for high-growth startups that address local challenges and have societal impact if they focused more on sector-specific problems, such

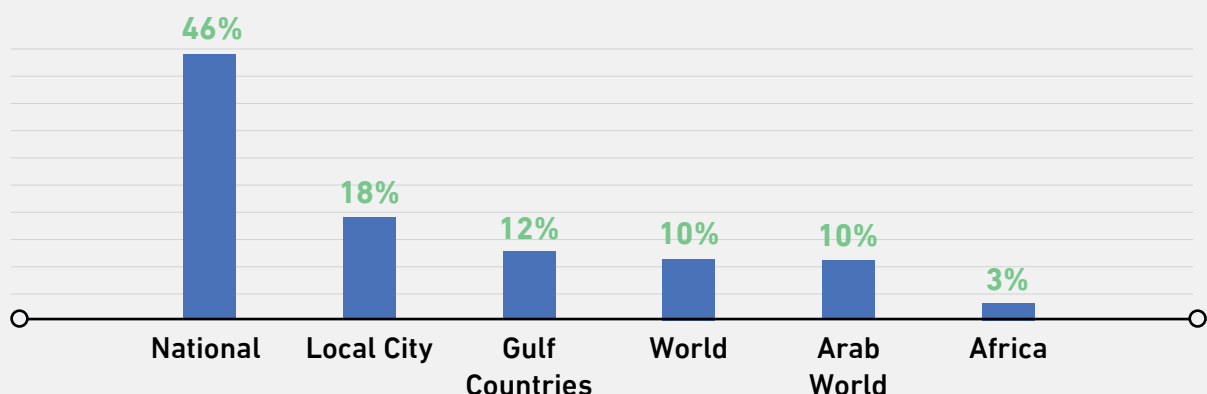
as FinTech, EdTech, MedTech, and other distinct tech-sector solutions, versus the current focus on general web and app development services.

Most tech startups were focused on the local market, at either national or city level, and 35% of participants opened markets outside Yemen in the region or globally.

## Sector Focus



## Geographic Focus



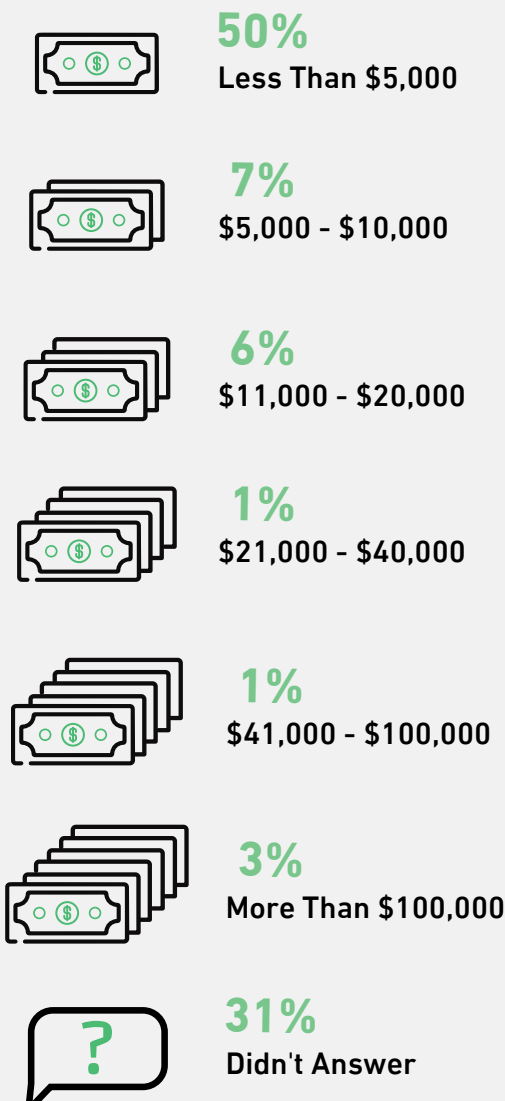
# Finance and Access to Capital

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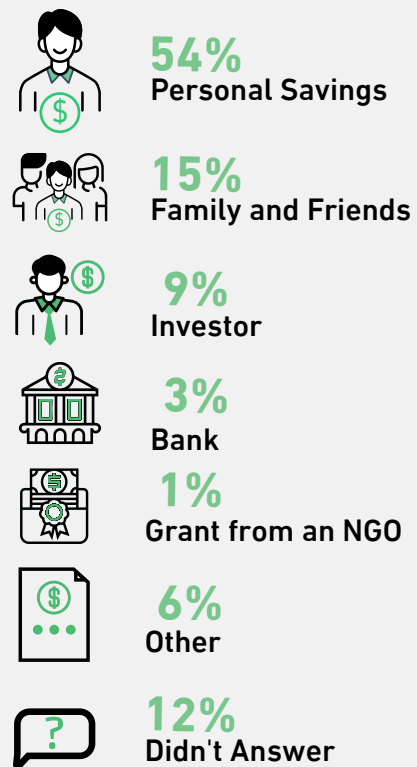
Half of the tech startups that participated in the survey started their businesses with capital of less than USD \$5,000. The main source of capital was personal savings (54%), while investors represented the source of capital for only 9% of startups.

While 31% chose not to disclose the amount of their startup capital, and 12% chose not to share the source of their capital, we noticed that those who were/are members of business incubators were more willing to share their information, and a higher percentage of them started with less capital (31% of participants have been members of a business incubator).

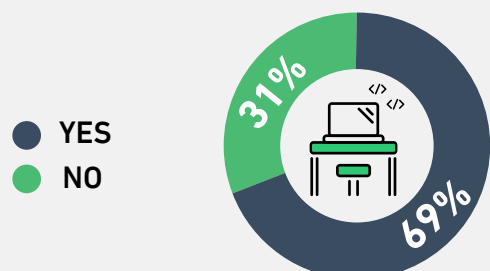
## How much capital did you need to launch your Startup?



## Source of Capital



## Have you been a member of an Incubator?



# Progress and Challenges in 2020

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The year 2020 was tough for Yemenis, since on top of the challenges presented by the ongoing conflict in the country, they also had to face the impacts of the COVID-19 global pandemic. However, most participants reported that their

businesses actually grew in 2020 (57%). This is consistent with the majority of participants reporting that they are currently in the growth stage of their startups (48%).

## Growth over the last 12 months



We Grew



22% Stayed The Same



21% Shrunk

## Stage



9% Developing the Prototype



25% Product/Market Fit



18% Stable Operations



48% Growth

When asked about the challenges that most and least affected tech startups in 2020, the responses revealed that tech startups were more focused on their businesses than the wider challenges related to the conflict. After six years of conflict, Yemeni entrepreneurs seem to have

internalized processes to deal with such major issues as security concerns and regulations, which, although they remain relevant to many of them, the entrepreneurs did not rate them highly in terms of impact.

## Challenges Rated as Highest Negative Impact:



Finding a Qualified Team



Internet Speed



Low Purchasing Power of Clients

## Challenges Rated as Least Negative Impact:



Security Concerns



Laws Catering to Business Needs



Electricity Availability

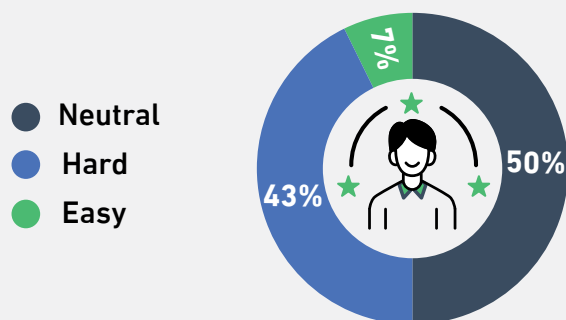
# Talent Acquisition and Development

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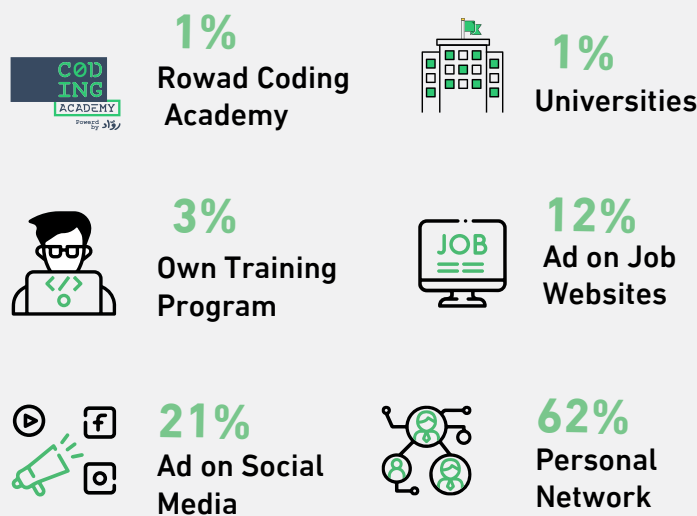
Responses from the Yemeni tech startups were divided when it comes to talent acquisition, with 50% perceiving recruitment of talent as neither hard or easy and 43% highlighting recruitment as a challenge. The majority of entrepreneurs relied on their personal networks to find talent to hire.

The perception of the quality of university graduates was also split, with 32% responding that they were weak, 29% that they were good, and 35% were on the fence and highlighted them as just acceptable. Only 3% perceived the quality of the skills of fresh graduates as excellent. The majority of them also indicated that they invest in the training and development of their staff (84%).

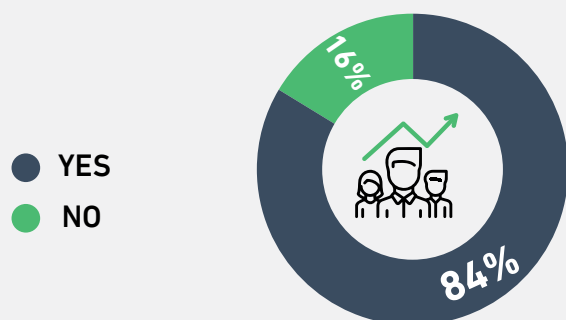
## Ease of Recruiting Talent in Yemen



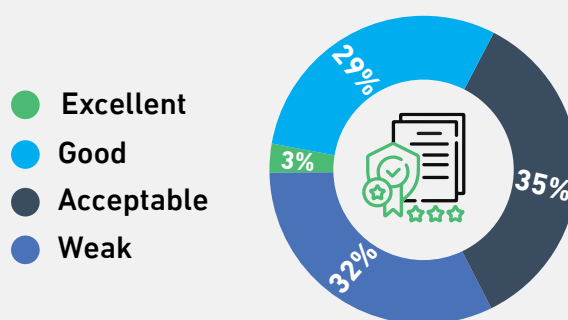
## What Channels Have You Used to Recruit Your Team?



## Do You Invest in Training and Developing Your Staff?



## Preception of Quality of Yemen Universities Fresh Graduates



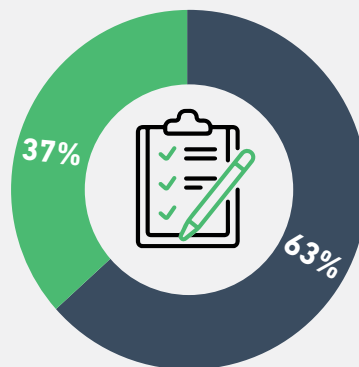
# Future

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Thinking about the future, most participants (90%) were optimistic and thought 2021 would be a better year than 2020, and 63% indicated their intent to hire new team members.

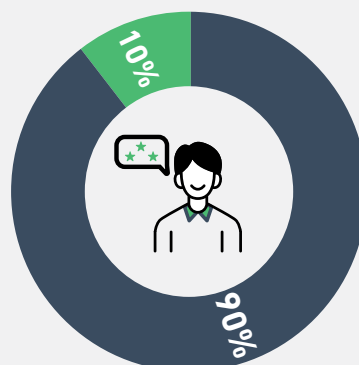
When asked about which tech sector they think will be most promising in Yemen over the coming couple of years, participants highlighted FinTech and e-commerce as key opportunity areas in Yemen over the coming couple of years.

## What are your plans for hiring in 2021?



● Increase Team Size ● Remain the Same Size

## Do you believe that 2021 will be better than 2020?



● Yes ● No

# Recommendations

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Based on the findings of the survey, we recommend the following to further develop the sector:

- Only 6% of tech startups surveyed were founded by females; it is important to further study the root causes of the low participation of females in tech entrepreneurship and develop interventions to boost female tech talent in Yemen and encourage them to launch their startups.
- Tech Startups can play a major role in solving social challenges in Yemen by leveraging technology, however the majority of tech startups surveyed provide generic web and app development services and are not engaged in understanding local challenges and developing solutions. It is important to work on developing relevant interventions to encourage more tech startups to step out of basic general service provision and into more sector-specific solutions.
- The Internet is one of few channels for Yemenis to have direct access and interactions with the rest of the world. However, the Internet connection in Yemen is one of the slowest and most expensive in the world. The tech startup community in Yemen needs to work collectively to pressure governments, INGOs, Telecom and ISP providers in Yemen to improve the Internet speed and connectivity infrastructure. Other interventions like creating hubs with fast internet connections at a reduced rate could be an intermediate intervention.

- There is a major lack of investors and other investment channels to help entrepreneurs launch their startups and then grow. Programs like accelerators, angel investors and eventually impact and venture capital are needed.
- Incubators seem to offer a home to many tech entrepreneurs, many of whom started at lower capital levels. Developing and supporting incubators with fast Internet connections and strong mentors in all Yemeni cities will provide Yemen tech entrepreneurs with a community and launching pad to start their businesses.
- The incubators could also provide the needed support to younger entrepreneurs (12% of tech startup founders were younger than 25 years old) and support fresh graduates to launch startups instead of waiting for jobs in a tough employment market like Yemen.
- Only 3% of tech startups perceived the skills of Yemeni fresh university graduates to be excellent. To further develop the industry in Yemen, it is critical to develop programs that focus on upskilling fresh graduates of local universities to be able to address local and international market needs. ROWAD Coding Academy, launched in 2019, was founded with this mission in mind. It is also important to create strong relations between these programs and local and regional markets to create virtuous cycles of highly trained Yemeni youth who add value to markets, and markets that are accessible and provide clear signals about needs.

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- While the ability of startups to survive and grow increases with having a team of founders compared to sole entrepreneurs, many Yemeni tech entrepreneurs choose to launch as a sole founder. There is a need to further understand this phenomenon, highlight the importance of partnerships in increasing the likelihood of startup survival and growth, and develop programs that emphasize collaboration and collective action.

Yemeni tech entrepreneurs over the last five years have been starting and growing new businesses despite the ongoing conflict and its challenges. They are catering to local and regional markets and have a positive outlook for the future. Their optimism and energy represent an opportunity in itself to bring impact and positive change. Technology and access to services and information offer Yemeni youth channels to have a voice, connect locally and globally, and participate constructively in their communities.

Please don't hesitate to fill our feedback form if you have any comments or suggestions:



<https://forms.gle/X7oc14qSPVLG8zgR9>

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