

## Assignment 2 feedback

How do the following five theories, as presented by Ahmad (2014), influence the [a] the current innovation and technology development challenges as contained/described in the current Namibian MSME National Policy, and [b] the current incubator's performances in Namibia?

- New venture creation theory
- Resource-based theory
- Social network theory
- Dyadic theory
- Real options theory

### Introduction 8 marks

The current innovation and technology development challenges as contained/described in the current Namibian MSME policy, 2.2.3 Constraints and opportunities for development (*Your points of departure should address or illustrate your comprehension of the said challenges first*):

***“Access to technology and research and development:*** *due to insufficient investments in research and development (R&D), Namibian MSMEs depend strongly on imported skills for the maintenance and operation of their imported technologies. According to the 2014 World Bank Enterprise Survey, close to 40% of medium enterprises use technology licensed from foreign companies. Furthermore, there is insufficient knowledge in Namibia on the availability of suitable technologies, with the result that the technology employed does not always match the needs of the enterprise using it.”*

*Objective: 4.6 Innovation, Technology Development and Adaptation*

*The Ministry of Industrialisation, Trade and SME Development acknowledges that research and development (R&D) and access to modern and efficient technologies are key factors in ensuring the competitiveness of Namibian MSMEs in a globalised economy. Therefore the Ministry aims at developing business incubators and laboratories across the country, thus allowing MSMEs to design prototypes or gain access to costly equipment, for example. Moreover, the Ministry seeks to create a favourable environment for technology transfer and a climate facilitating an effective incorporation of imported technology into the socio-economic environment of Namibia, e.g., by making training programmes compulsory when new technologies are imported. Recommendations: (a) Stimulate product development and improvements in quality - ranging from production to final packaging - focusing on high-value markets and niche products. (b) Partner up with research institutions, universities and vocational training centres across the country to develop science and technology centres, thus providing easier access to technologies and innovation for MSMEs and stimulating the absorption of new technologies. (c) Develop fiscal and non-fiscal incentives to promote R&D, such as studies and pilot initiatives, and the establishment of a label for the most innovative MSMEs. (d) Raise awareness regarding compliance with intellectual property rights and the advantages of compliance for the development of MSMEs. (e) Sensitise MSMEs on the advantages of newest sales technologies, such as e-commerce.*

Briefly define each respective theory.

Business Incubation definition in general terms, citing sources.

An outline of the order of responses, i.e. in addressing part a and then part b of the question.

**Discussion in essay format** (16 marks per theory)

See below table for points of discussion. The highlighted text are prompts of what you should discuss or argue around or on.

Theory	Key points
New venture theory	<p data-bbox="376 236 1675 264"><b>Business incubation (BI) typologies influence the internal process embarked on and therefore the steps taken.</b></p> <p data-bbox="468 308 2051 480"><i>Under this view, researchers describe a number of mutually exclusive components or stages of the incubation process such as: diagnosis of needs; selection and monitoring; capital investment; and access to expert networks (Campbell et al., 1985; Brooks, 1986). Typologies or models are proposed such as: not-for-profit; university based; corporate; high-tech, and these are compared and contrasted on the basis of a number of characteristics ascribed to the model's particular method, or style of incubation (Lumpkin and Ireland, 1988; Allen and McCluskey, 1990; Weinberg et al., 1991).</i></p> <p data-bbox="376 560 2051 695">It seems that previous researchers have ignored what Gartner (1985) has identified as key to understanding the new venture creation process. Gartner (1985) suggests that any new venture is a gestalt of variables from four dimensions: (1) individual(s)-the person(s) involved in starting a new organization; (2) organization – the kind of firm that is started; (3) environment – the situation surrounding and influencing the new organization; and (4) new venture process – the actions undertaken by the individuals to start the venture</p> <p data-bbox="468 738 2051 804"><b>Most especially the third dimension, that enabling climate is a critical factor for your discussion. What is made available to help entrepreneurs and access to technology?</b></p> <p data-bbox="468 810 2024 839"><b>A type of venture needs to fit with the promoter thereof. BI services comes in at the fourth dimension, you need to discuss how so.</b></p>
Resource based theory	<p data-bbox="376 887 2051 1094">A number of researchers (including: McAdam and McAdam, 2008; Patton et al., 2009; Todorovic and Moenter, 2010), by drawing from the RBV of the firm (Penrose, 1959), 378 IJEBR 20,4 view incubation as a mechanism of awarding a stock of tangible and in-tangible resources to client firms that results in, in addition to other benefits, client firm growth. Resources here are not just tangible resources, but other intangibles including proximity to markets, sources of knowledge (universities) and clustering effects similar to that of a Community of Practice. The impact of these resources on the client firm, it is argued, results in access to new knowledge, expertise and networks, ultimately leading to growth.</p> <ul data-bbox="468 1137 808 1203" style="list-style-type: none"> <li>- HOW?.</li> <li>- What type of resources?</li> </ul> <p data-bbox="376 1246 2051 1374">The basic logic behind the RBV is for the firm to develop sustainable competitive advantage (SCA) allowing the earning of economic rents or above-average returns. Hence, RBV would dictate a three-tiered (and interlinked) role of incubators: “how” to help client firms develop SCA and superior performance; “what” are the characteristics and types of advantage-generating resources; and “influencers” of strategic choices by client firm managements. It is suggested that the role of incubators lies in the second tier only, i.e. in identifying firm resource</p>

	<p>needs and aiding in resource deployment. This is so since in the first tier the inherent competitiveness of the client firm’s offer comes into play and in the third tier, “influencers” of strategic choice are usually environmental variables which lie outside the control of both client firms and incubators. Even in the second tier, a problem is encountered; McAdam and McAdam (2008) found that the most crucial factor determining the ability of firms to use incubator resources is an “effective management team.” Thus, is an incubator organization designed to infuse resources to build effective entrepreneurial teams? As McAdam and McAdam show through their review of past literature, effective team building is mostly dependent on personal capabilities and personality traits – aspects seemingly beyond the scope of incubator organizations to practically influence.</p> <ul style="list-style-type: none"> <li>- As much as resources are made or to be made available, strategic usage thereof is not in the control of the BI.</li> <li>- Incubatee TEAMS have a role to play as well.</li> <li>- Access may be provided, but utilisation is equally not in control of government</li> </ul>
3 Social network theory	<p>Incubatorrr-incubation researchers have utilized social network theory to investigate the impact of internal and external network connections on incubatee development and growth (To”ttermann and Sten, 2005; Evald and Bager, 2008; McAdam and McAdam, 2006; Bøllingtoft and Ulhøi, 2005; Hughes et al., 2007; McAdam and Marlow, 2007) and view incubation as a system for increasing client firms’ network density. There are a number of interesting findings which emerge from the work of the above researchers; first,</p> <ul style="list-style-type: none"> <li>- the physical space and the company mix of an incubator play an important role in increasing the network dynamic of an incubator. In other words, it is suggested, that two aspects promote active client networking inside incubators: <ul style="list-style-type: none"> <li>(1) some unique features of the architectural design and configuration of the incubator space; and (the layout design on an incubator could foster networking/socialisation or hinder it. Example. Open plan office spaces could promote socialisation compared to “private” offices. Common meeting areas such as kitchenet could foster networking. Secluded office spaces, such as at NBII discourages networking). Explain what it means not just list.</li> <li>(2) the type of companies inducted – some types of companies network more readily than others (this is where selection criteria or type of incubator plays a critical role. Businesses that are involved in the same industry tend to socialise easily due to commonality. The peer-to-peer exposure facilitates the eventual networking within the incubator. Outside same industries, certain types of businesses by nature may seclude the owner from the rest of the crowd).</li> </ul> </li> </ul> <p>Second, researchers discuss the importance of internal networks, as opposed to external, in incubation success. Drawing from network and social capital theory (Podsakoff et al., 2000) researchers agree that incubators facilitate the creation of entrepreneurial networks. They argue that a very useful indicator for gauging the quality of incubation is firm “network density,” i.e. new and live network nodes that client firms</p>

	<p>create as a result of the strategic involvement of the incubator management. Arguably, the higher the network density, the greater the client satisfaction with incubator services.</p> <p><b>Are Namibian BI and BDS providers building networks which their clients can access? Yes/no How?</b></p> <p>Further, research assumes that networking is an activity that incubating firms actively engage in on their own initiative. This is not always the case since common organizational values, leadership behaviors and other factors can significantly impact firm and individual network behavior (Podsakoff et al., 2000).</p> <p><b>So how or what should BI do to overcome this internal issue? Is it within the scope of the BI?</b></p> <p>Third, researchers also highlight disadvantages of client networking in incubators (Evald and Bager, 2008; McAdam and Marlow, 2007), which they suggest can lead to problems in the development of social networks...suggests that the internal environment of the incubator is punctuated by the presence of power struggles, shifting coalitions, self-interest, secrecy and even lying. A degree of inevitability is assumed when it comes to disharmony and political tension in an incubation setting where two rationales are presented for these problems: first, is the issue of close physical proximity of firms with comparable attributes involved in similar lines of business (McAdam and Marlow, 2007); and, second the multi-tiered structure of incubators with competing stakeholders leads to shifting organizational objectives and priorities which leads to conflict (Evald and Bager, 2008). The role of incubators is then to create a collaborative culture by reducing political rivalries and self-interest.</p> <p><b>A key issue here. Unpack it and discuss how that can hinder the perceived performance of BI and access to technology. What should the BI do, especially on the first issue?</b></p>
Dyadic theory	<p>Researchers (including Rice, 2002; Warren et al., 2009) suggest that incubators and entrepreneurs operate in an inter-dependent “co-production dyad” where business assistance is co-produced between the IM as the regular producer and the incubator company as the consumer producer. Viewed through the lens of dyadic theory, incubation would be a process <b>of co-producing developmental assistance in independent incubator-client dyads.</b></p> <p>Instead this approach views incubation as occurring in an inter-dependent “co-production dyad” between the IM and the incubating firm. Researchers argue that by customizing co-production to fit the <b>readiness</b> profiles of entrepreneurs, IMs can enhance the aggregate impact of co-production on their portfolios of incubator companies.</p> <p>...the clients and their valuation of the usefulness of incubation to firm development and growth. What Rice’s work has done is that it laid</p>

	<p>the foundation for future more client-centric incubator assessments (Abduh et al., 2007; Hughes et al., 2007)... the quality, quantity, frequency, intensity, scale, scope and ultimately the output of incubation are all dependant on a variety of relationship specific factors in the dyad</p> <ul style="list-style-type: none"> <li>- Are Namibian incubators client-centric in their approach or internally focused? Defend your viewpoint.</li> <li>- Discuss the importance of co-production within the BI relationship and how that would influence BI performance.</li> <li>- The establishment of relations with corporate and local authorities to further avail access to resources and technology.</li> <li>- Partnerships for technology accessibility?</li> </ul>
Real option	<p>...In the domain on non-financial investments, the real options methodology was initially proposed for the evaluation of technological assets, such as R&amp;D, typically a very structured and rationalized activity (Cave and Minty, 2004). Though it seemed possible that the options logic might equally be relevant to the venture decision making of entrepreneurs, it is evident that the process is not as structured or rational as investment in R&amp;D projects (Grant and Perren, 2002). The question to therefore consider is: can a firm, which has applied for incubation, be considered a “real option” by an incubator, as Hackett and Dilts suggest, since, strictly speaking, such an “option” does not in fact create any avenues for the incubator to make subsequent larger financial investments and neither does this “call option” gives the incubator any right to cash-in on subsequent increases in option value? In other words, in order for a new client to be a real option for an incubator, the incubator must have a stake in it. This scenario is not applicable for not-for-profit incubators.</p> <ul style="list-style-type: none"> <li>- How should investments in technology be approached under this theory?</li> <li>- Only for gain-incubators can take takes in businesses they invest in. What is the Namibian profile like? Who owns most incubators in Namibia? Is this approach suggested above applicable to Namibia?</li> <li>- No universal selection criteria can be applicable. Why not?</li> </ul> <p>In summary, real options’ assertion that clients can be rationally selected from a pool of available options by employing “selection criteria” (based on the attractiveness and fit of firm proposal to incubator strategy) is problematic. It is not possible to develop a universally applicable set of selection criteria or the capabilities firms ought to develop for marketplace success. This is because there are considerable differences between incubators, their client firms and the markets they service. (Ahmad, 2014)</p>

Conclusion 8 marks

Reference list 4 marks