



LEVEL 7 ASSESSMENT SPECIFICATION

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Programme:	MBA		
Module:	Human Resources Management		
Module code:	BMMB7007	Contribution to Overall Module Assessment (%):	50%
Lecturer:	Dr. M. Cheung	Internal Verifier:	Dr Terence Li
Assignment Title:	Assignment 1	Word count (or equivalent):	15 minutes (Not more than 20 pages of PPT)
Submission deadline:	15 Dec 2019 - Oral Presentation 22 Dec 2019 - Submission of finalized PowerPoint slides	Return date of provisional marks & written feedback:	14 working days after submission of finalized PowerPoint slides
Submission method:	All written assessments, where practical and possible, must be submitted via Turnitin unless otherwise instructed by the Lecturer. (Please DO NOT put this assessment specification into Turnitin or it will match many similarities with other students' submissions.) Late submission of the assessment will result in a late penalty mark. Penalties for late submission: Up to one week late, maximum mark of 50%. Over one week late, 0%. Only the Extenuating Circumstances Panel may approve a change to submission dates.		
Academic honesty / referencing:	Academic honesty is required. In the main body of your submission you must give credit to authors on whose research and ideas your work is based. Append to your submission a reference list that indicates the books, articles, etc. that you have used, cited or quoted in order to complete this assessment.		

Digital Dairy Farming

Impact & Implication of Human Resource

BMMB7007 Human Resources Management

Assignment 1

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2019-12-01

Company Background

- The Kowloon Dairy Limited is a Hong Kong based, private owned company with 4 production sites and 2 dairy farms in Hong Kong and China.

(The Kowloon Dairy Limited, 2019)



Environmental Factors influencing Dairy Farming

External Factor - Political

1. In 2018, Chinese Government policy to strengthen the supervision on Dairy Farms, increase the transparency on farm operation and digitalize the information flow.

External Factor – Technology

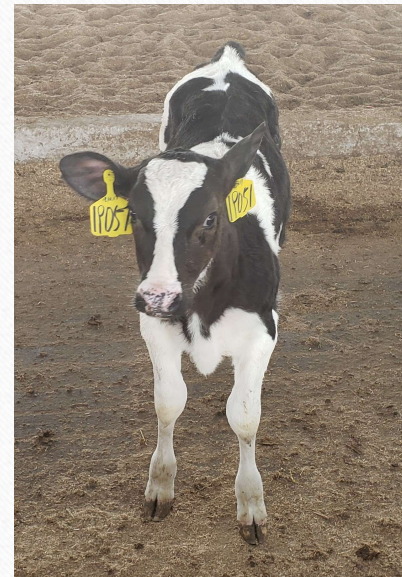
2. IoT for farm management is available. Aim to drive reduce the labour, improve the accuracy and productivity.

(Afimilk, 2019)

Environmental Factors influencing Dairy Farming

Internal Factors

In order to comply with the government requirement, Kowloon Dairy invested on upgrading the equipment including both hardware and software.



HR Challenges in Dairy Farming

30% Dairy Worker Age 50+ in China.

Labour Intensive: 42 workers per 1000 cows.

Unattractive work condition for young generation.

(Eastern Along, 2014)



Goal for Transformation

Comply with Government policy

Reduce use of labour

Improve the quality of work

Attracting young generation

Comply with Government Policy

Digitalize Herd Management Overview



Big Data



- Animal Health
- Milking
- Nutrition
- Animal Welfare
- Environment
- Socio-economic management



Decision

(FAO and IDF, 2011)

Reduce use of labour

Manual Milking

- Labour Intensive
- Milking time >15 minutes
- Poor hygiene

(Marchi, Penasa, and Cassandro, 2017)



Reduce use of labour

Milking with IoT

- Reduced to 4 workers per Milking, 4-8 minutes per cow.
- RFID in combine with the milking system generate real-time data



Reduce use of labour

Improve the quality of work

Computerized Feeding

- Replace of Manual Feeding
- Computerized record avoid overfeeding & underfeeding
- Veterinary can program and review individual heifer



(The Dairyland Initiative, 2011)

Improve the quality of work

Increase performance for Veterinary

Traditional Farming

- Routine Health Check up
- Time consuming

Digital Farming

- Real-time RFID for cow movement
- Data Available: Resting time, Drinking and Feeding time
- Veterinary can base on the information, access the health and delivery better quality of work, such as preventive measures

Attracting young generation

Age Group And number of farm workers	2016 Prior implementation of IoT	2019
20 – 30	5	10
31 – 40	12	8
41 – 50	10	7
51 – 60	13	3
Total	40	28

(Source: from this research)

Impact on HR practice

- Desirable

Real-time information sharing with high accuracy. (Li et al. 2017)

Be proud of the organization and higher sense of belonging. (Hou and Fan, 2014)

Undesirable

- Computer / IT literacy is needed after the transformation
 - Staff may need additional training or work relocation
 - Additional resource is needed for better data generation and analytics

Recommendation

1. Implantation of automatic milking system (Schewe and Stuart, 2015)
2. Implantation of robotic feed dispensary system (Kilic & Durmusoglu, 2015)
 - Further reduce the labour cost

Conclusion

- Incorporate technology (Big Data, IoT, Robotic) into digital farming
 - Comply with the government requirements
 - Reduce the elder workers ratio and attract younger generation
 - Increase the efficiencies & quality of work (Real-time, less human errors)
 - Additional training is needed for the transformation

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