

# **Influential Article Review- Employing the Quality Startup Management System Structure in Hong Kong Businesses**

**Mack Moran**

**Darrel Alvarado**

**Sophia Graham**

*This paper examines business models. We present insights from a highly influential paper. Here are the highlights from this paper: The innovation and technology industries have become key areas to which the HKSAR Government is committed for advanced technology development and new economic driven. In order to nurture and support local technology startups grow and flourish successfully, HKSTP had signed a memorandum of understanding (MOU) with Hong Kong Quality Assurance Agency (HKQAA) to support incubation programmes through business matching and quality assurance mechanisms for startup companies. Hong Kong Society for Quality (HKSQ) was invited by HKQAA to be one of members in the advisory committee for this recognition scheme. Then, focus group was formed from different parties, including but not limited to incubatees, incubators, investors, HKSTP, HKQAA, HKSQ and other concerned stakeholders. This paper aims to introduce a systematic approach model named “Quality Startup Management System (QStarMS) Model” through literature review and analysis, focus group and case study. QStarMS integrated Business Side of startup using Business Model Generation/Canvas (BMG/C) and Management Side under ISO 9001:2015 Quality Management System, as well as, to simplify the model to fit startups requirements and overcome their limitations. Finally, we will report the recently progress of the QStarMS implementation through HKQAA Registration – Startups scheme. For our overseas readers, we then present the insights from this paper in Spanish, French, Portuguese, and German.*

*Keywords: Quality Startup, ISO 9001:2015, Incubation Program, QStarMS*

## **SUMMARY**

- Plan phase. It considers «Customer Value Infrastructure» from Customer Segments to Value Proposition to Channels and then to Customer Relationships ; where Revenue Streams belongs to Finance aspect under Check Phase.
- Do phase. It considers «Business Value Infrastructure» from Key Resources to Key Activities and then to Key Partnerships ; where Cost Structure also belongs to Finance aspect under Check phase. KA is classified as Products aspect; KR and KP are classified as Environment aspects.
- In Do phase—Products aspect, both HKSTP incubation milestone assessment’s «Product Development» and HKQAA assessment checklist for startup «Quality Control» are integrated to

help startup to develop their products/services. It is a reasonable integration for product design and prototype development based on Tables 2 and 3.

- In Do phase—Environment aspect, it related to «HKSTP Service Utilization» under HKSTP incubation milestone assessment and «InfoSec Control» under HKQAA assessment checklist for startup.
- Check phase. In Check phase, it usually considers startup financial performance. Therefore, the finance aspect included Cost Structure and Revenue Streams to be assessed. We observed that many startup milestone assessments in Headcount and Sales Revenue did not meet as they planned . Therefore, HKSTP Business Development supports are across the Check Phase to Plan Phase that work as Continual Improvement.
- Act phase. After Plan, Do and Check Phase, the assessment results obtained from HKSTP Incubation Milestone Assessment and HKQAA Assessment Checklist that would be pointed out as «Area for Improvement » for startup consideration and improvement on four aspects included Customers, Products, Environment and Finance.
- Implementation. After signed Memorandum of understanding with HKSTP in May 2015, HKQAA has developed the startup registration scheme with HKSTP and HKSQ in the coming year. Finally, HKQAA defined 25 questions covered «General », «Quality Control », «Financial Control » and «Information Security Control » in the Registration Handbook Appendix A. We decided to select potential incubatees in HKSTP for pilot program.
- The briefing session is mainly explained the program concept and benefit for assisting startup to build their management competence and to create opportunity for their business development. The workshop was arranged by HKSTP and demonstrated how to reply 25 questions by using HKSTP Laboratories as example. After that we recruited 11 incubatees who are interested in joining the scheme. Those incubatees have got good performance under HKSTP milestone assessment and then nominated for HKQAA Registration—Startup scheme.
- After the implementation, we got startups’ feedback and comments that most of them satisfy the scheme during the post audit evaluation. The post audit customer satisfaction questionnaires included audit arrangement, process, report and team knowledge, as well as conclusion.

## HIGHLY INFLUENTIAL ARTICLE

We used the following article as a basis of our evaluation:

LAI, K.-H. L. (2017). Implementing the Quality Startup Management System model in Hong Kong: a case study. *International Journal of Quality Innovation*, 3(1), 1–13.

This is the link to the publisher’s website:

<https://jqualityinnovation.springeropen.com/articles/10.1186/s40887-017-0013-x>

## INTRODUCTION

Hong Kong Science and Technology Parks Corporation (HKSTP) is a statutory body inaugurated on 7 May 2001 by the HKSAR Government. Our vision is to create a vibrant innovation and technology ecosystem to deliver social and economic benefits to Hong Kong and the region; and our mission is connect stakeholders, facilitate knowledge transfer and nurture talents to accelerate technological innovation and commercialization. In order to achieve Science Parks vision and mission, HKSTP incubation programmes provide incubation services to assist technology startups in their vulnerable inception stages, enabling them to grow and flourish. Incubation Programme is split into three key areas, custom-made for startups in the fields of web and mobile technology, technology and biotechnology—Incu-App, Incu-Tech and Incu-Bio.

Hong Kong Quality Assurance Agency (HKQAA), a non-profit-distributing organization, was established by the Hong Kong Government in 1989 to help industry and commerce in the development of

quality, environmental, safety, hygiene, social and other management systems. Their missions are to promote management concepts in accordance with the applicable management system standards, to assist industry and commerce to implement relevant systems and to deliver world-class conformity services.

Hong Kong Society for Quality (HKSQ) as professional body has formed since 1986. Its members includes executives, managers, engineers, industry practitioners, academics, students and those who are interested in quality engineering, management and associated disciplines and practices in organizations of respective industries in Hong Kong and abroad. HKSQ is one of advisory bodies to share knowledge and expertise for developing the Quality Startup Management System so as to fulfill the 2nd core aspect “Recognition for Innovation and Technology Startup Company” through the Quality Startup Recognition Scheme for all incubatees under the incubation programmes in HKSTP.

In order to enhance technology startup growth in Hong Kong, HKSTP and HKQAA had signed a memorandum of understanding (MOU) in March 2015. It aims to support incubation programmes with a mutual understanding for the following four core aspects:

1. Business Matching,
2. Recognition for Innovation and Technology Startup Company,
3. Community for Innovation and Technology Professional, and
4. Promoting Management Concepts and Knowledge Transfer.

After that HKQAA has developed the startup registration scheme to provide recommended practices for the startups to systematically manage their operations, particularly in quality, financial and information security aspects [1]. The scheme achieving performance objectives by defining and monitoring the measurable targets and goals are shown as follows:

1. Reducing business risks by identifying and managing the risks
2. Continual improvement of operations
3. Demonstrating management competence
4. Enhancing business partners’ confidence

## **CONCLUSION**

We believe the business opportunity and management skill level, as well as, survival rate will be enhanced if startups employ Quality Startup Management System (QStarMS) Model and have registration under HKQAA-HKSTP Startup Recognition Scheme. QStarMS model consists of BMC startup basic business function, key elements of ISO 9001, concerns of Information Security (InfoSec) control and the core value of all management system, i.e. continual improvement. The model will help to overcome the difficulties and limitation for startups’ business and product development, and to enhance their management skill level. The next step is to enlarge the participants and to arrange more business matching, as well as, contacting with investor (e.g. HKBAN) to let them know the quality of our registered startups. We have planned to prepare some documents template in order to facilitate the startup and invite some experts or specialist to sharing more on IP registration, service agreement preparation. The new round of business matching activities between HKSTP and HKQAA have launched in 2017.

## **APPENDIX**

FIGURE 1  
THE QUALITY STARTUP RECOGNITION MODEL AND ITS COOPERATION IDEAS

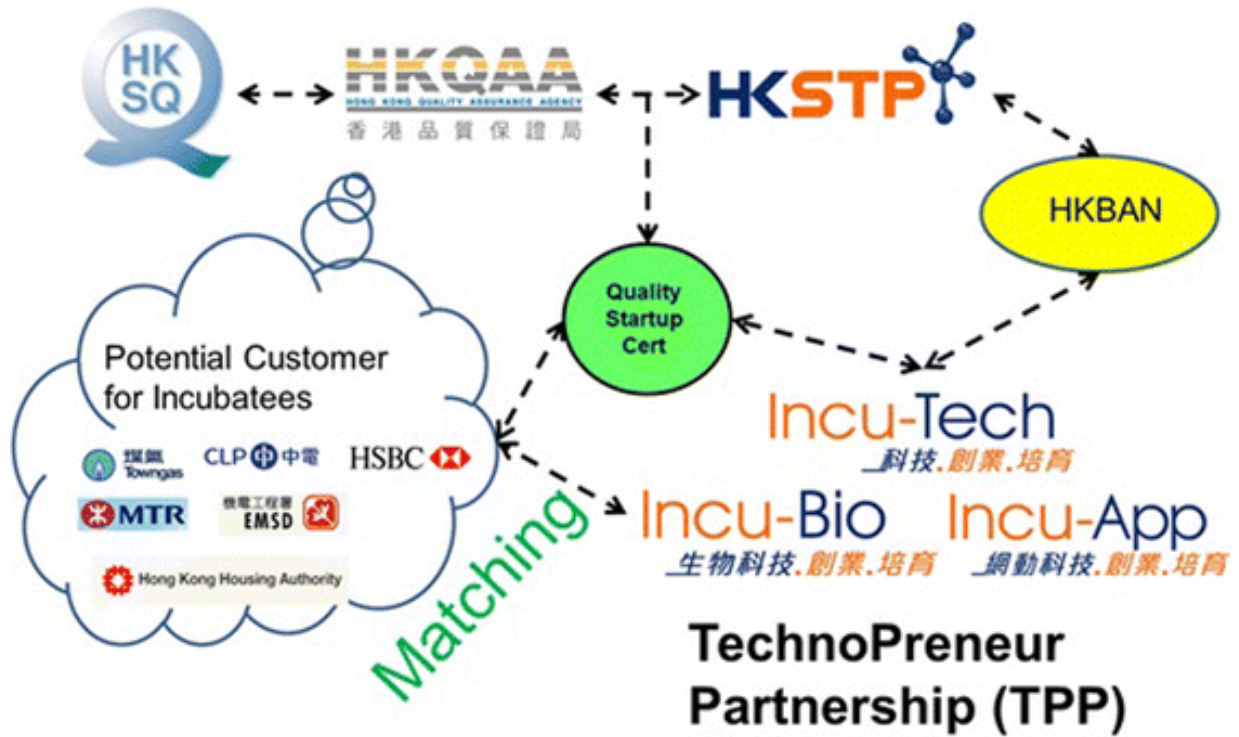
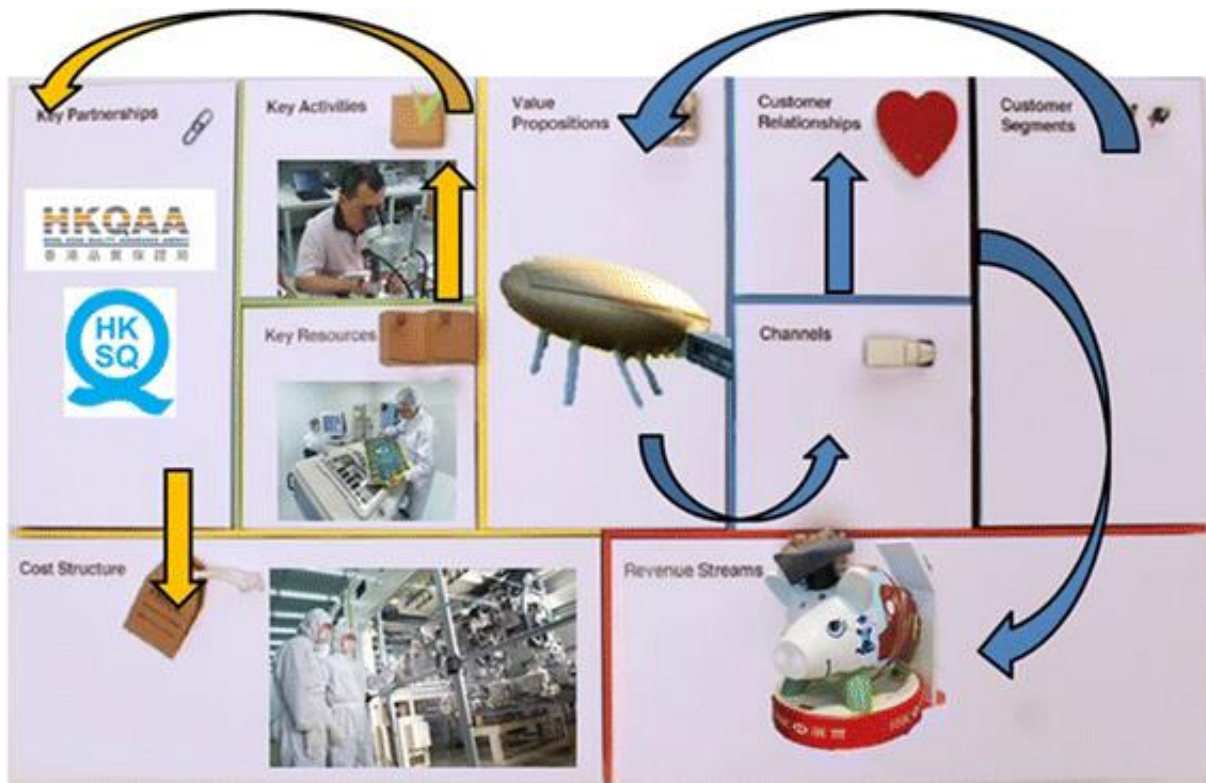


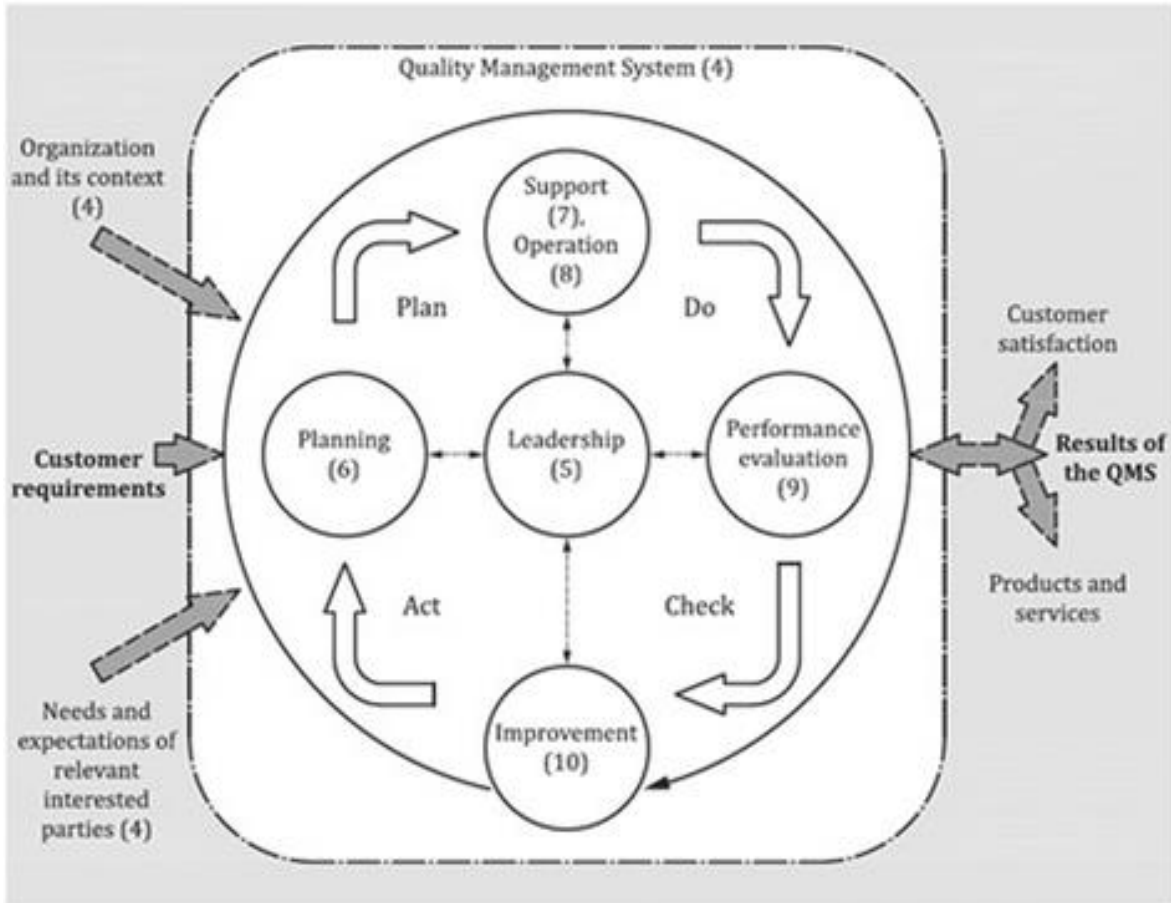
FIGURE 2

**THE BUSINESS MODEL CANVAS WITH THE NINE BUILDING BLOCKS (E.G. INCUBATION PROGRAMME)**

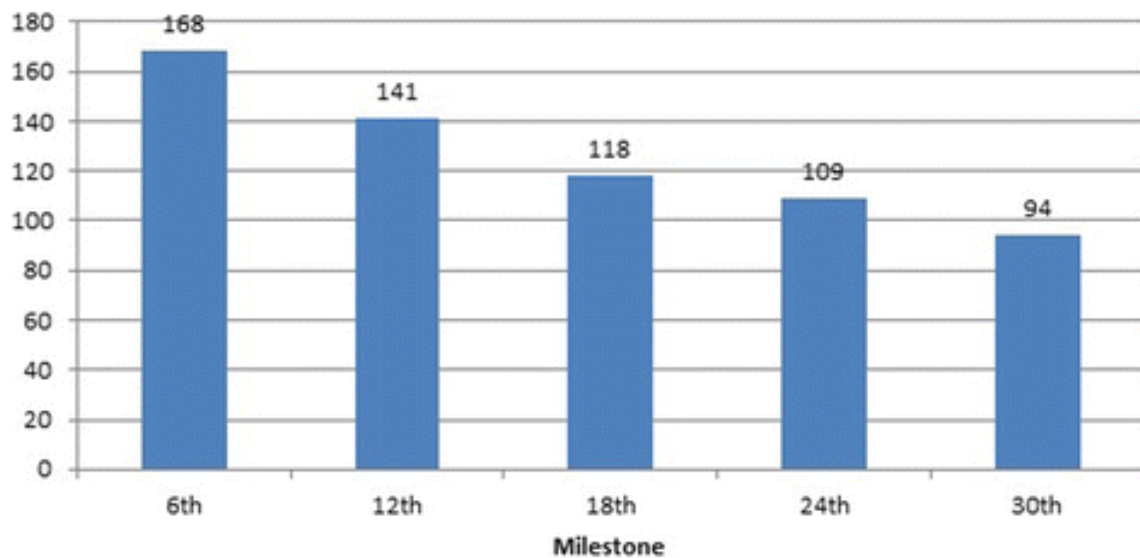


**FIGURE 3**

**THE QUALITY MANAGEMENT SYSTEM MODEL (ISO 9001:2015)**

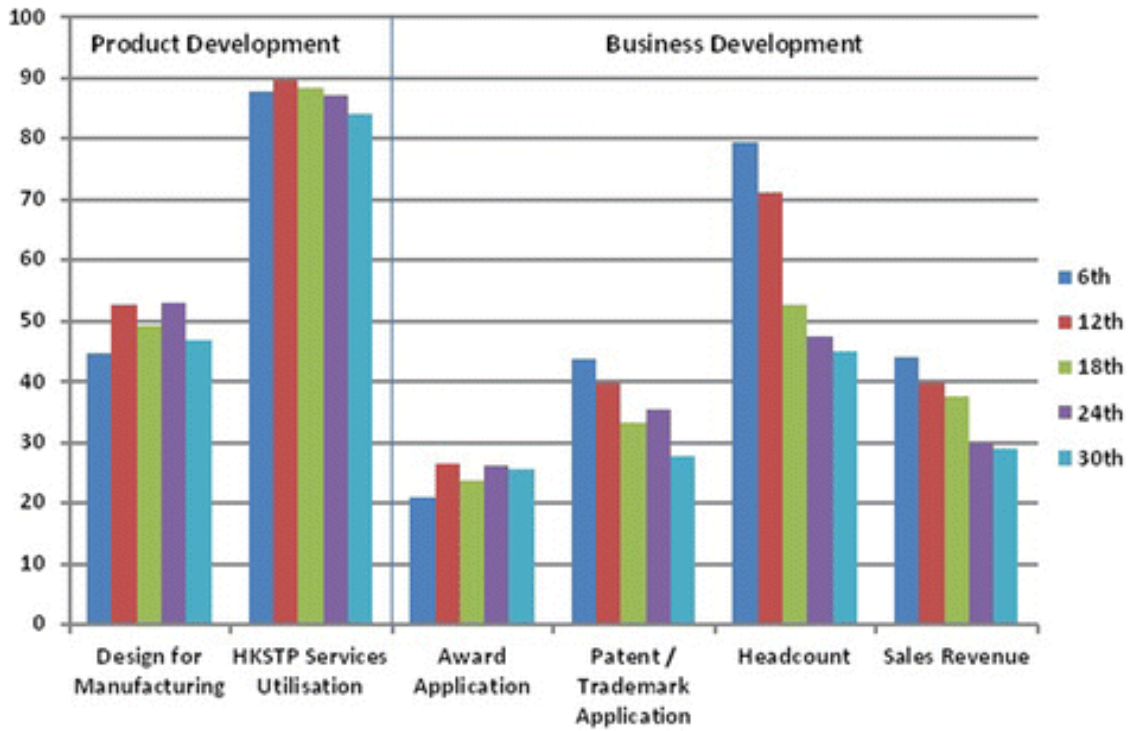


**FIGURE 4**  
**NO. OF COMPANY COMPLETED EACH INCUTECH MILESTONE ASSESSMENT**

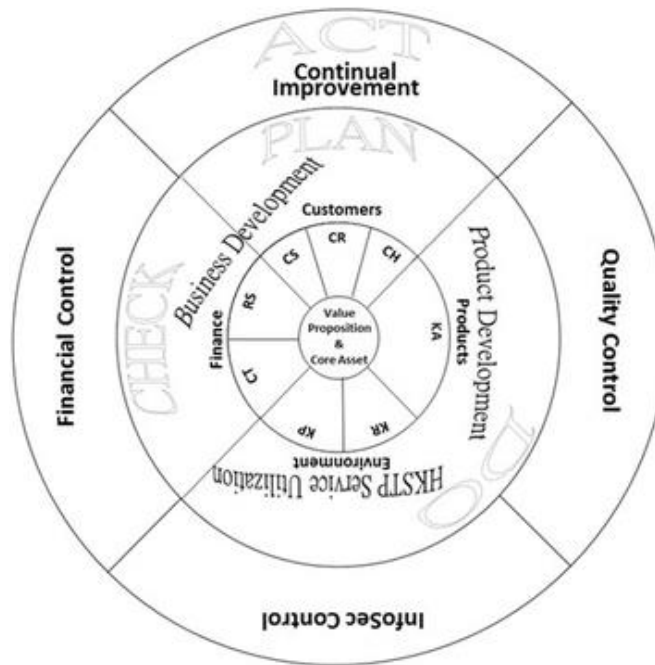


**FIGURE 5**

**STATISTICS OF SOME FEATURES ON INCUTECH MILESTONE ASSESSMENTS**



**FIGURE 6**  
**THE QUALITY STARTUP MANAGEMENT SYSTEM MODEL (QSTARMS MODEL)**



**TABLE 1**  
**KEY CLAUSES OF ISO 9001:2015**

<b>Clauses of ISO 9001:2015</b>		
1. Scope	2. Normative References	3. Terms and Definition
4. Context of Organization	7. Support	
<ul style="list-style-type: none"> <li>– Understanding the organization and its context</li> <li>– Needs and expectations of interested parties</li> <li>– Determining the scope</li> <li>– Management System</li> </ul>	<ul style="list-style-type: none"> <li>– Resources</li> <li>– Competence</li> <li>– Awareness</li> <li>– Communication</li> <li>– Documented information</li> </ul>	
5. Leadership	8. Operations	
<ul style="list-style-type: none"> <li>– Leadership and commitment, Policy</li> <li>– Roles, responsibility and authority</li> </ul>	<ul style="list-style-type: none"> <li>– Operation planning and control</li> </ul>	
6. Planning	9. Performance Evaluation	
<ul style="list-style-type: none"> <li>– Actions to address risks &amp; opportunities</li> <li>– Objectives and plans to achieve them</li> </ul>	<ul style="list-style-type: none"> <li>– Monitoring, measurement, analysis &amp; evaluation</li> <li>– Internal audit</li> <li>– Management review</li> </ul>	
10. Improvement		
<ul style="list-style-type: none"> <li>– Non-conformity and corrective action</li> <li>– Continual improvement</li> </ul>		

**TABLE 2**  
**COMPARISON OF MILESTONE ASSESSMENT CRITERIA AMONG INCU-APP, INCU-BIO AND INCU-TECH**

<b>Incu-Tech and Incu-Bio</b>	<b>Incu-App</b>
Product Development Progress	
<ul style="list-style-type: none"> <li>• Design Work</li> <li>• Design for Manufacturing</li> <li>• Testing</li> <li>• Prototype/Sample</li> <li>• Product Demonstration</li> <li>• Trial Client/Pilot Site</li> </ul>	<ul style="list-style-type: none"> <li>• Design Work</li> <li>• Technical Testing</li> <li>• Usability Testing</li> <li>• Product Launch</li> </ul>
HKSTP Service Utilization	
<ul style="list-style-type: none"> <li>• Laboratory Service</li> <li>• Assistant Funding</li> <li>• Industry and University Collaboration, etc.</li> </ul>	
Business Development Progress	



<ul style="list-style-type: none"> <li>• Business Partnership</li> <li>• Sales and Marketing Activities</li> <li>• Award Application</li> <li>• Number of Client</li> <li>• Patent/Trademark Application</li> <li>• Funding Activities</li> <li>• Headcount</li> <li>• Sales Revenue</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic Partners/Business Collaboration</li> <li>• Promotion and Traffic Driving</li> <li>• Award Application</li> <li>• Download Rate</li> <li>• Patent/Trademark/Design Registration</li> <li>• Capital/Government Funding</li> <li>• Headcount</li> <li>• Sales Revenue</li> </ul>
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**TABLE 3**  
**HKQAA QUALITY STARTUP RECOGNITION SCHEME—REGISTRATION HANDBOOK**  
**APPENDIX A**

Three focus area	Checklist topic
General	1. Establishing measurable performance objectives
	2. Reviewing the achievements of performance objectives
	3. Corrective and preventive action plan if deviated
	4. Contingency plan to resume its operation
Quality Control	5. Identification of customer requirements for product/sendee
	6. Review and confirm requirements
	7. Control processes for production, delivery and after sales sendees
	8. Review compliance to established control processes
	9. Resources—Identify staff competence requirement
	10. Resources—Ensure staff who fulfill competence requirement
	11. Resource—Identify material, equipment, machine and infrastructure needs
	12. Resources—Confirm/verify those specifications
	13. Resources—Monitoring those fit for use (e.g. PM. Calibration)
	14. Design—Development plan for product/sendee
	15. Design—Specifications from customer requirement
	16. Design—Review its design and development progress
	17. Design—Verify the final designs of product/sendees
Financial Control	18. Budget plan for its operations
	19. Monitor the actual cost against the budget

	20. Mitigation measures if undesirable trends
	21. Procurement procedure
Information Security Control	22. Contractual agreements and responsibility definition
	23. Classify information assets and implement access control
	24. Information backup
	25. Information Disposal

**TABLE 4**  
**HKQAA & HKSTP PILOT PROGRAM OF QUALITY STARTUP RECOGNITION SCHEME**

Date	Items	Incubatees participated	Remark
25 Jan 2016	The 1st Briefing Session	10	HKQAA and HKSTP
25 Feb 2016	The 1st QStartup Workshop	7	HKSTP and HKQAA
18 Mar 2016	The 2nd Briefing Session	8	HKQAA and HKSTP
23 Mar 2016	The 2nd QStartup Workshop	4	HKSTP and HKQAA
30 Mar 2016	HKSTP Incubation Program Graduation Ceremony	9	HKSTP announce pilot program
13 May 2016	HKQAA Symposium	11	HKQAA formal launch the registration scheme

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## **TRANSLATED VERSION: SPANISH**

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

## **VERSION TRADUCIDA: ESPAÑOL**

A continuación se muestra una traducción aproximada de las ideas presentadas anteriormente. Esto se hizo para dar una comprensión general de las ideas presentadas en el documento. Por favor, disculpe cualquier error gramatical y no responsabilite a los autores originales de estos errores.

## **INTRODUCCIÓN**

Hong Kong Science and Technology Parks Corporation (HKSTP) es un organismo estatutario inaugurado el 7 de mayo de 2001 por el Gobierno de la RAEHK. Nuestra visión es crear un ecosistema de innovación y tecnología vibrante para ofrecer beneficios sociales y económicos a Hong Kong y la región; y nuestra misión es conectar a las partes interesadas, facilitar la transferencia de conocimiento y fomentar talentos para acelerar la innovación tecnológica y la comercialización. Con el fin de lograr la visión y la misión de los Parques Científicos, los programas de incubación de la HKSTP proporcionan servicios de incubación para ayudar a las startups de tecnología en sus etapas de inicio vulnerables, lo que les permite crecer y florecer. El Programa de Incubación se divide en tres áreas clave, hechas a medida para startups en los campos de la tecnología web y móvil, la tecnología y la biotecnología: Incu-App, Incu-Tech e Incu-Bio.

El Gobierno de Hong Kong estableció en 1989 la Agencia de Garantía de la Calidad de Hong Kong (HKQAA), una organización sin fines de lucro, para ayudar a la industria y el comercio en el desarrollo de sistemas de calidad, medio ambiente, seguridad, higiene, redes sociales y otros sistemas de gestión. Sus

misiones son promover conceptos de gestión de acuerdo con las normas del sistema de gestión aplicables, ayudar a la industria y el comercio a implementar los sistemas pertinentes y ofrecer servicios de conformidad de clase mundial.

La Sociedad de Calidad de Hong Kong (HKSQ) como organismo profesional se ha formado desde 1986. Sus miembros incluyen ejecutivos, gerentes, ingenieros, profesionales de la industria, académicos, estudiantes y aquellos que están interesados en la ingeniería de calidad, gestión y disciplinas y prácticas asociadas en organizaciones de industrias respectivas en Hong Kong y en el extranjero. HKSQ es uno de los órganos consultivos que comparten conocimientos y conocimientos especializados para el desarrollo del Sistema de Gestión de Startups de Calidad con el fin de cumplir con el segundo aspecto central "Reconocimiento para la Innovación y la Empresa de Startups Tecnológicas" a través del Esquema de Reconocimiento de Startups de Calidad para todas las incubaciones en el marco de los programas de incubación en HKSTP.

Con el fin de mejorar el crecimiento de las startups tecnológicas en Hong Kong, HKSTP y HKQAA habían firmado un memorando de entendimiento (MOU) en marzo de 2015. Su objetivo es apoyar los programas de incubación con un entendimiento mutuo para los cuatro aspectos fundamentales siguientes:

1. Coincidencia de negocios,
2. Reconocimiento a la Empresa Startup de Innovación y Tecnología,
3. Community for Innovation and Technology Professional, y
4. Promover conceptos de gestión y transferencia de conocimientos.

Después de eso HKQAA ha desarrollado el esquema de registro de startups para proporcionar prácticas recomendadas para que las startups gestionen sistemáticamente sus operaciones, particularmente en aspectos de calidad, financieros y de seguridad de la información [1]. El esquema que alcanza los objetivos de rendimiento definiendo y monitoreando los objetivos y metas medibles se muestran de la siguiente manera:

1. Reducir los riesgos empresariales identificando y gestionando los riesgos
2. Mejora continua de las operaciones
3. Demostrar competencia en gestión
4. Mejorar la confianza de los socios comerciales

## **CONCLUSIÓN**

Creemos que la oportunidad de negocio y el nivel de habilidad de gestión, así como, la tasa de supervivencia se mejorará si las startups emplean el modelo del sistema de gestión de inicio de calidad (qstars) y tienen registro bajo el esquema de reconocimiento de inicio HKQAA-HKSTP. El modelo qstars consiste en la función de negocio básica de inicio de BMC, elementos clave de ISO 9001, las preocupaciones de control de Seguridad de la Información (infosec) y el valor central de todo el sistema de gestión, es decir, la mejora continua. El modelo ayudará a superar las dificultades y limitaciones para el desarrollo de negocios y productos de startups, y a mejorar su nivel de habilidad de gestión. El siguiente paso es ampliar a los participantes y organizar más coincidencias de negocios, así como, ponerse en contacto con el inversor (por ejemplo, HKBAN) para hacerles saber la calidad de nuestras startups registradas. Hemos planeado preparar algunos documentos de plantilla con el fin de facilitar la puesta en marcha e invitar a algunos expertos o especialistas a compartir más sobre el registro de la P.I. y la preparación de acuerdos de servicio. La nueva ronda de actividades de conciliación de negocios entre HKSTP y HKQAA se ha lanzado en 2017.

## **TRANSLATED VERSION: FRENCH**

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

## **VERSION TRADUITE: FRANÇAIS**

Voici une traduction approximative des idées présentées ci-dessus. Cela a été fait pour donner une compréhension générale des idées présentées dans le document. Veuillez excuser toutes les erreurs grammaticales et ne pas tenir les auteurs originaux responsables de ces erreurs.

## **INTRODUCTION**

Hong Kong Science and Technology Parks Corporation (HKSTP) est un organisme statutaire inauguré le 7 mai 2001 par le gouvernement de la RASHK. Notre vision est de créer un écosystème dynamique d'innovation et de technologie pour apporter des avantages sociaux et économiques à Hong Kong et à la région; et notre mission est de connecter les parties prenantes, de faciliter le transfert des connaissances et de développer les talents pour accélérer l'innovation technologique et la commercialisation. Afin de réaliser la vision et la mission des parcs scientifiques, les programmes d'incubation HKSTP fournissent des services d'incubation pour aider les startups technologiques dans leurs phases de création vulnérables, leur permettant de grandir et de s'épanouir. Le programme d'incubation est divisé en trois domaines clés, sur mesure pour les startups dans les domaines de la technologie web et mobile, de la technologie et de la biotechnologie : Incu-App, Incu-Tech et Incu-Bio.

Hong Kong Quality Assurance Agency (HKQAA), une organisation à but non lucratif de distribution, a été créée par le gouvernement de Hong Kong en 1989 pour aider l'industrie et le commerce dans le développement de systèmes de gestion de qualité, d'environnement, de sécurité, d'hygiène, sociale et autres. Leurs missions sont de promouvoir les concepts de gestion conformément aux normes applicables du système de gestion, d'aider l'industrie et le commerce à mettre en œuvre des systèmes pertinents et à fournir des services de conformité de classe mondiale.

Hong Kong Society for Quality (HKSQ) en tant qu'organisme professionnel s'est formé depuis 1986. Ses membres comprennent des cadres, des gestionnaires, des ingénieurs, des praticiens de l'industrie, des universitaires, des étudiants et ceux qui s'intéressent à l'ingénierie de qualité, la gestion et les disciplines et pratiques associées dans les organisations des industries respectives à Hong Kong et à l'étranger. HKSQ est l'un des organismes consultatifs à partager les connaissances et l'expertise pour le développement du système de gestion des startups de qualité afin de remplir le 2ème aspect de base " Reconnaissance pour l'innovation et la technologie Startup Company " par le biais du programme de reconnaissance des startups de qualité pour tous les incubates dans le cadre des programmes d'incubation dans HKSTP.

Afin de renforcer la croissance des startups technologiques à Hong Kong, HKSTP et HKQAA avaient signé un protocole d'accord (PE) en mars 2015. Il vise à soutenir les programmes d'incubation avec une compréhension mutuelle pour les quatre aspects essentiels suivants :

1. Correspondance d'affaires,
2. Reconnaissance pour innovation et technologie Startup Company,
3. Communauté d'innovation et de technologie professionnelle, et
4. Promouvoir les concepts de gestion et le transfert de connaissances.

Après cela, HKQAA a développé le système d'enregistrement des startups pour fournir aux startups des pratiques recommandées pour gérer systématiquement leurs opérations, en particulier dans les aspects de la qualité, financière et de la sécurité de l'information [1]. Le programme d'atteinte des objectifs de performance en définissant et en surveillant les objectifs mesurables est présenté comme suit :

1. Réduire les risques commerciaux en identifiant et en gérant les risques
2. Amélioration continue des opérations
3. Démontrer la compétence en gestion
4. Renforcer la confiance des partenaires commerciaux

## **CONCLUSION**

Nous croyons que le niveau d'opportunité d'affaires et de compétence en gestion, ainsi que le taux de survie seront améliorés si les startups utilisent le modèle du système de gestion de démarrage de qualité (qstars) et ont été enregistrés dans le cadre du programme de reconnaissance de démarrage HKQAA-HKSTP. Le modèle qstars se compose de la fonction métier de base du démarrage de BMC, des éléments clés de l'iso 9001, des préoccupations concernant le contrôle de la sécurité de l'information (infosec) et de la valeur de base de tout système de gestion, c'est-à-dire une amélioration continue. Le modèle aidera à surmonter les difficultés et les limitations pour le développement des entreprises et des produits des startups, et à améliorer leur niveau de compétence en gestion. La prochaine étape consiste à élargir les participants et à organiser plus d'appariement des affaires, ainsi que, en contact avec les investisseurs (par exemple HKBAN) pour leur faire connaître la qualité de nos startups enregistrées. Nous avons prévu de préparer un modèle de documents afin de faciliter la démarrage et d'inviter quelques experts ou spécialistes à partager plus sur l'enregistrement IP, la préparation des ententes de service. Le nouveau cycle d'activités de jumelage entre HKSTP et HKQAA a été lancé en 2017.

### **TRANSLATED VERSION: GERMAN**

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

### **ÜBERSETZTE VERSION: DEUTSCH**

Hier ist eine ungefähre Übersetzung der oben vorgestellten Ideen. Dies wurde getan, um ein allgemeines Verständnis der in dem Dokument vorgestellten Ideen zu vermitteln. Bitte entschuldigen Sie alle grammatikalischen Fehler und machen Sie die ursprünglichen Autoren nicht für diese Fehler verantwortlich.

### **EINLEITUNG**

Hong Kong Science and Technology Parks Corporation (HKSTP) ist eine gesetzliche Einrichtung, die am 7. Mai 2001 von der HKSAR-Regierung gegründet wurde. Unsere Vision ist es, ein dynamisches Innovations- und Technologie-Ökosystem zu schaffen, das Hongkong und der Region soziale und wirtschaftliche Vorteile bringt; und unsere Mission ist es, Stakeholder zu vernetzen, Wissenstransfer zu erleichtern und Talente zu fördern, um technologische Innovation und Kommerzialisierung zu beschleunigen. Um die Vision und Mission von Science Parks zu erreichen, bieten HKSTP-Inkubationsprogramme Inkubationsdienste an, um Technologie-Startups in ihren anfälligen Gründungsstadien zu unterstützen und sie in die Lage zu versetzen, zu wachsen und zu gedeihen. Das Inkubationsprogramm gliedert sich in drei Schlüsselbereiche, die speziell für Startups in den Bereichen Web- und Mobiltechnologie, Technologie und Biotechnologie entwickelt wurden: Incu-App, Incu-Tech und Incu-Bio.

Hong Kong Quality Assurance Agency (HKQAA), eine Non-Profit-Distributions-Organisation, wurde 1989 von der Regierung Hongkongs gegründet, um Industrie und Handel bei der Entwicklung von Qualitäts-, Umwelt-, Sicherheits-, Hygiene-, Sozial- und anderen Managementsystemen zu unterstützen. Ihre Aufgaben sind die Förderung von Managementkonzepten in Übereinstimmung mit den geltenden Managementsystemstandards, die Unterstützung von Industrie und Handel bei der Implementierung relevanter Systeme und die Bereitstellung von Konformitätsdienstleistungen von Weltklasse.

Die Hong Kong Society for Quality (HKSQ) als Berufsverband hat sich seit 1986 gegründet. Zu seinen Mitgliedern gehören Führungskräfte, Manager, Ingenieure, Industriepraktiker, Akademiker, Studenten und diejenigen, die sich für Qualitätstechnik, Management und damit verbundene Disziplinen und Praktiken in Organisationen der jeweiligen Industrien in Hongkong und im Ausland interessieren. HKSQ ist eines der

Beratungsgremien, die Wissen und Know-how für die Entwicklung des Qualitäts-Startup-Management-Systems austauschen, um den zweiten Kernaspekt "Anerkennung für Innovation und Technologie-Startup-Unternehmen" durch das Quality Startup Recognition Scheme für alle Inkubationsprogramme im Rahmen der Inkubationsprogramme in HKSTP zu erfüllen.

Um das Wachstum von Technologie-Startups in Hongkong zu fördern, hatten HKSTP und HKQAA im März 2015 eine Absichtserklärung unterzeichnet. Ziel ist es, Inkubationsprogramme mit gegenseitigem Verständnis für die folgenden vier Kernaspekte zu unterstützen:

1. Business Matching,
2. Anerkennung für Innovations- und Technologie-Startup-Unternehmen,
3. Community for Innovation and Technology Professional und
4. Förderung von Managementkonzepten und Wissenstransfer.

Danach hat HKQAA das Startup-Registrierungssystem entwickelt, um den Startups empfohlene Vorgehensweisen zur systematischen Verwaltung ihrer Operationen zu bieten, insbesondere in Den Bereichen Qualität, Finanzen und Informationssicherheit [1]. Das Schema zur Erreichung der Leistungsziele durch die Festlegung und Überwachung der messbaren Ziele und Ziele wird wie folgt dargestellt:

1. Reduzierung von Geschäftsrisiken durch Identifizierung und Management der Risiken
2. Kontinuierliche Verbesserung der Betriebsabläufe
3. Nachweis der Managementkompetenz
4. Stärkung des Vertrauens der Geschäftspartner

## **SCHLUSSFOLGERUNG**

Wir glauben, dass die Geschäftschancen- und Management-Fähigkeiten sowie die Überlebensrate verbessert werden, wenn Startups das qstarms-Modell (Quality Startup Management System) anwenden und sich unter HKQAA-HKSTP Startup Recognition Scheme registrieren lassen. Qstarms-Modell besteht aus BMC Startup grundlegende Business-Funktion, Schlüsselemente von ISO 9001, Bedenken der Information Security (infosec) Steuerung und den Kernwert aller Management-System, d.h. Kontinuierliche Verbesserung. Das Modell wird dazu beitragen, die Schwierigkeiten und Einschränkungen für die Geschäfts- und Produktentwicklung von Startups zu überwinden und deren Management-Fähigkeiten zu verbessern. Der nächste Schritt besteht darin, die Teilnehmer zu erweitern und mehr Business Matching zu arrangieren, sowie Kontakt aufnahmeweise mit dem Investor (z.B. HKBAN), um ihnen die Qualität unserer registrierten Startups mitzuteilen. Wir haben geplant, einige Dokumente Vorlage vorzubereiten, um das Start-up zu erleichtern und laden einige Experten oder Spezialisten, mehr über IP-Registrierung, Service-Vereinbarung Vorbereitung zu teilen. Die neue Runde der Business Matching-Aktivitäten zwischen HKSTP und HKQAA ist 2017 gestartet.

## **TRANSLATED VERSION: PORTUGUESE**

Below is a rough translation of the insights presented above. This was done to give a general understanding of the ideas presented in the paper. Please excuse any grammatical mistakes and do not hold the original authors responsible for these mistakes.

## **VERSÃO TRADUZIDA: PORTUGUÊS**

Aqui está uma tradução aproximada das ideias acima apresentadas. Isto foi feito para dar uma compreensão geral das ideias apresentadas no documento. Por favor, desculpe todos os erros gramaticais e não responsabilize os autores originais responsáveis por estes erros.

## **INTRODUÇÃO**

Hong Kong Science and Technology Parks Corporation (HKSTP) é um órgão estatutário inaugurado em 7 de maio de 2001 pelo Governo HKSAR. Nossa visão é criar um ecossistema vibrante de inovação e tecnologia para oferecer benefícios sociais e econômicos a Hong Kong e à região; e nossa missão é conectar stakeholders, facilitar a transferência de conhecimento e nutrir talentos para acelerar a inovação tecnológica e a comercialização. Para alcançar a visão e a missão dos Parques Científicos, os programas de incubação do HKSTP fornecem serviços de incubação para ajudar as startups de tecnologia em suas fases de início vulneráveis, permitindo que elas cresçam e floresçam. O Programa de Incubação é dividido em três áreas-chave, feitas sob medida para startups nas áreas de tecnologia web e móvel, tecnologia e biotecnologia — Incu-App, Incu-Tech e Incu-Bio.

A Agência de Garantia da Qualidade de Hong Kong (HKQAA), uma organização sem fins lucrativos de distribuição, foi criada pelo governo de Hong Kong em 1989 para ajudar a indústria e o comércio no desenvolvimento de sistemas de qualidade, meio ambiente, segurança, higiene, sociais e outros sistemas de gestão. Suas missões são promover conceitos de gestão de acordo com as normas aplicáveis do sistema de gestão, ajudar a indústria e o comércio a implementar sistemas relevantes e fornecer serviços de conformidade de classe mundial.

Hong Kong Society for Quality (HKSQ) como órgão profissional é formado desde 1986. Seus membros incluem executivos, gerentes, engenheiros, profissionais do setor, acadêmicos, estudantes e aqueles que estão interessados em engenharia de qualidade, gestão e disciplinas e práticas associadas em organizações de respectivas indústrias em Hong Kong e no exterior. A HKSQ é um dos órgãos consultivos a compartilhar conhecimento e expertise para o desenvolvimento do Sistema de Gestão de Startups de Qualidade, de modo a cumprir o 2º aspecto central "Reconhecimento para Inovação e Empresa de Startup de Tecnologia" por meio do Esquema de Reconhecimento de Startups de Qualidade para todos os incubadores sob os programas de incubação no HKSTP.

A fim de melhorar o crescimento das startups de tecnologia em Hong Kong, hkstp e HKQAA assinaram um memorando de entendimento (MOU) em março de 2015. Tem como objetivo apoiar programas de incubação com um entendimento mútuo para os seguintes quatro aspectos centrais:

1. Correspondência de negócios,
2. Reconhecimento para empresa de startups de inovação e tecnologia,
3. Comunidade para Profissionais de Inovação e Tecnologia, e
4. Promovendo Conceitos de Gestão e Transferência de Conhecimento.

Depois disso, a HKQAA desenvolveu o esquema de registro de startups para fornecer práticas recomendadas para que as startups gerenciem sistematicamente suas operações, particularmente em aspectos de qualidade, financeiro e segurança da informação [1]. O esquema que atinge objetivos de desempenho definindo e monitorando as metas e metas mensuráveis são mostrados da seguinte forma:

1. Redução dos riscos dos negócios identificando e gerenciando os riscos
2. Melhoria contínua das operações
3. Demonstrando competência de gestão
4. Aumentar a confiança dos parceiros de negócios

## CONCLUSÃO

Acreditamos que o nível de habilidade de oportunidade de negócios e gerenciamento, bem como, a taxa de sobrevivência será aprimorada se as startups empregarem o Modelo de Quality Startup Management System (qstarsms) e tiverem registro no HKQAA-HKSTP Startup Recognition Scheme. O modelo qstarsms consiste na função básica de negócios de startup BMC, nos principais elementos da ISO 9001, nas preocupações com o controle de Segurança da Informação (infosec) e no valor central de todo o sistema de gestão, ou seja, melhoria contínua. O modelo ajudará a superar as dificuldades e limitações para o desenvolvimento de negócios e produtos das startups e melhorar seu nível de habilidade de gestão. O próximo passo é ampliar os participantes e organizar mais correspondência de negócios, bem como, entrar em contato com o investidor (por exemplo, HKBAN) para que eles saibam a qualidade de nossas startups



cadastradas. Planejamos preparar alguns modelos de documentos para facilitar a startup e convidar alguns especialistas ou especialistas para compartilhar mais sobre registro de IP, preparação de contrato de serviço. A nova rodada de atividades de correspondência de negócios entre hkstp e HKQAA foi lançada em 2017.